### **PCT**

## WORLD INTELLECTUAL PROPERTY ORGANIZATION International Bureau



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)						
(51) International Patent Classification <sup>5</sup> :	A2	(11) International Publication Number:	WO 93/16178			
C12N 15/11, C12Q 1/68		(43) International Publication Date:	19 August 1993 (19.08.93)			
(21) International Application Number: PCT/US (22) International Filing Date: 12 February 1993		Olson and Bear, 620 Newpor	rt Center Drive, 16th Floor			
(30) Priority data: 07/837,195 12 February 1992 (12.02.9	92) I	JS (81) Designated States: AU, CA, JP, CH, DE, DK, ES, FR, GB, PT, SE).	European patent (AT, BE, GR, IE, IT, LU, MC, NL,			
(71) Applicant: THE UNITED STATES OF AMERIC presented by THE SECRETARY, DEPARTM HEALTH AND HUMAN SERVICES [US/US ington, DC (US).	ENT (	F Published	eport and to be republished			
(72) Inventors: VENTER, Craig, J.; 1718 Nordic Hi Silver Spring, MD 20906 (US). ADAMS, Ma 12812 Sage Terrace, Germantown, MD 208' MORENO, Ruben, F.; 14415 Coral Gables Wa Potomac, MD 20878 (US).	rk, D. 74 (US	o.;				
•						
		i				

(54) Title: SEQUENCES CHARACTERISTIC OF HUMAN GENE TRANSCRIPTION PRODUCT

#### (57) Abstract

Partial and complete human cDNA and genomic sequences corresponding to particular expressed sequence tags (ESTs). The ESTs are cDNA sequences that are generally between 150 and 500 base pairs in length, are derived from human brain cDNA libraries, correspond to genes transcribed in human brain, and have base sequences identified herein as SEQ ID NOS: 1-2421.

#### FOR THE PURPOSES OF INFORMATION ONLY

Codes used to identify States party to the PCT on the front pages of pamphlets publishing international applications under the PCT.

AT	Austria	FR	France	MR	Mauritania
AU	Australia	GA	Gabon	MW	Malawi
BB	Barhados	CB	United Kingdom	NL	Netherlands
BE	Belgium	GN	Guinea	NO	Norway
BF	Burkina Faso	CR	Greece	NZ	New Zealand
BC	Bulgaria	HU	Hungary	PL	Potand
BJ	Benin	ΙE	Ireland	PT	Portugal
BR	Brazil	IT	Italy	RO	Romania
CA	Canada	JP	Japan	RU	Russian Federation
CF	Central African Republic	KP	Democratic People's Republic	SD	Súdan
CC	Congo		of Korea	SE	Sweden
СН	Switzerland	KR	Republic of Korea	SK	Słovak Republic
Ct	Côte d'Ivoire	KZ	Kazaklistan	SN	Senegal
CM	Cameroon	1.1	Liechtenstein	SU	Soviet Union
CS	Czechoslovakia -	LK	Sri Lanka	TD	Chad
CZ	Czech Republic	LU	Luxembourg	TG	Togo
DE	Germany	MC	Monaco	UA	Ukraine
DK	Denmark	MG	Madagascar	US	United States of America
ES	Spain	Ml.	Mali	VN	Viet Nam
FI	Finland	MN	Mongolia		

# SEQUENCES CHARACTERISTIC OF HUMAN GENE TRANSCRIPTION PRODUCT

5

10

15

20

25

#### Technical Field

The present invention relates to newly identified polynucleotide sequences corresponding to transcription products of human genes, and to complete gene sequences associated therewith.

#### Background

This invention relates to human genes. Identification and sequencing of human genes is a major goal of modern scientific research. The sequence of human genes is more than just a scientific curiosity. For example, by identifying genes and determining their sequences, scientists have been able to make large quantities of valuable human "gene products." These include human insulin, interferon, Factor VIII, tumor necrosis factor, human growth hormone, tissue plasminogen activator, and numerous other compounds. Additionally, knowledge of gene sequences can provide the key to treatment or cure of genetic diseases (such as muscular dystrophy and cystic fibrosis). The present invention represents a quantum leap forward in mankind's knowledge of human gene sequences.

There are several basic concepts of molecular biology which figure prominently in the invention. A brief explanation of those concepts follows. Additional background information and definitions for scientific terms can be found

30

WO 93/16178

5

10

15

20

25

30

35

in the literature. See, for example, "Glossary of Genetics, Classical and Molecular" by R. Rieger, A. Michaelis, and M.M. Green (Fifth Edition, Springer-Verlag, New York (1991)). The contents of this and other publications cited in the specification are incorporated by reference herein.

At an initial level, the present invention is based on identification and characterization of gene segments. Genes are the basic units of inheritance. Each gene is a string of connected bases called nucleotides. Most genes are formed of deoxyribonucleic acid, DNA. (Some viruses contain genes of ribonucleic acid, RNA.) The genetic information resides in the particular sequence in which the bases are arranged. A short sequence of nucleotides is often called a polynucleotide or an oligonucleotide.

Like genes, polypeptides are built from long strings of individual units. These units are amino acids. nucleotide sequence of a gene tells the cell the sequence in which to arrange the amino acids to make the polypeptide encoded by that gene. In general, chains of up to about 200 amino acids are called polypeptides, while proteins are larger molecules made up of polypeptide subunits; both types molecules are referred to generally herein polypeptides. A triplet of nucleotides (codon) in DNA codes for each amino acid or signals the beginning or end of the message (anticodon). The term codon is also used for the corresponding (and complementary) sequences of nucleotides in the mRNA into which the original DNA sequence is transcribed.

Generally, enzymes in the cell transcribe the permanent DNA of the gene into a temporary RNA copy, called messenger RNA or mRNA. The mRNA, in turn, can be translated into a polypeptide by the cell. This entire process is called gene expression, and the polypeptide is the gene product encoded by the gene.

Scientists have previously discovered how to reverse the transcription process and copy mRNA back into DNA using an

WO 93/16178

5

10

15

20

25

30

35

enzyme called reverse transcriptase. The resulting is called complementary DNA, or cDNA. This is schematically shown in the single Figure. When substantially all of the mRNA from one cell or tissue is converted to cDNA at once and cloned into multiple copies of a recombinant vector to allow replication and manipulation in the laboratory, the result is called a cDNA library.

The various types of genes include those which code for polypeptides, those which are transcribed into RNA but are not translated into polypeptides, and those whose functional significance does not demand that they be transcribed at all. Most genes are found on large molecules of DNA located in chromosomes. Double stranded cDNA carries information of a gene. Each base of the first strand is joined to a complementary base (hybridized) in the second The linear DNA molecules in chromosomes have strand. thousands of genes distributed along their length. Chromosomes include both coding regions (coding polypeptides) and noncoding regions; the coding regions. represent only about three percent of the total chromosome sequence.

An individual gene has regulatory regions that include a promoter which directs expression of the gene, a coding region which can code for a polypeptide, and a termination signal. The regulatory DNA sequence is usually a noncoding region that determines if, where, when, and at what level a particular gene is expressed.

The coding regions of many genes are discontinuous, with coding sequences (exons) alternating with noncoding regions (introns). The final mRNA copy of the gene does not include these introns (which can be much longer than the coding region itself), although it does contain certain untranslated regions that usually do not code for the polynucleotide gene product. Untranslated sequences at the beginning and end of the mRNA are known as 5'- and 3'-untranslated regions,

5

10

15

20

25

30

35

-4-

respectively. This nomenclature reflects the orientation of the nucleotide constituents of the mRNA.

A cDNA is a DNA copy of a messenger RNA, which contains all of the exons of a gene. The cDNA can be thought of as having three parts: an untranslated 5' leader, uninterrupted polypeptide-coding sequence, and untranslated region. The untranslated leader and trailing sequences are important for initiation of translation, mRNA stability, and other functions. The untranslated leader and trailing sequences are called 5'- and 3'-untranslated sequences, respectively. The 3' untranslated sequence is usually longer than the 5' untranslated leader, and can be longer than the polypeptide-coding sequence. untranslated regions typically have many, randomlydistributed stop codons, and do not display the nonrandom base arrangements found in coding sequences. untranslated sequence is relatively short, generally between 20 and 200 bases. The 3'-untranslated sequence is often many times longer, up to several thousand bases.

The translated or coding sequence begins with a translational start codon (AUG or GUG) and ends with a translational stop codon (UAA, UGA, or UAG). Generally, translation begins at the first "start" codon on the mRNA and proceeds to the first "stop" codon. Coding sequences can be distinguished by their nonrandom distribution of bases; numerous computer algorithms have been developed to distinguish coding from noncoding regions in this way.

Human DNA differs from person to person. No two persons (except perhaps identical twins) have identical DNA. While the differences, called allelic variations or polymorphisms, are slight on a molecular level, they account for most of the physical and other observable differences between individuals. It has been estimated that approximately 14 million sequence polymorphism differences exist between individuals.

10

15

20

25

30

35

The ability of one strand of DNA to attach or hybridize to a complementary strand has already been exploited for several purposes. For example, small pieces of DNA (15 to 25 base pairs long) can be made which will hybridize to longer strands of DNA which have a complementary sequence. short "primers" can be selected such that they hybridize to a specific, unique location on the longer strand. Once the primers have hybridized to their target on the DNA, the polymerase chain reaction (PCR) can be employed to generate millions of copies of (or amplify) the particular segment of DNA between the locations to which two primers are bound. Briefly, this technique allows amplification of a DNA region situated between two convergent primers. oligonucleotide primers that hybridize to opposite strands. Primer extension proceeds inward across the region between 🚌 the two primers, and the product of DNA synthesis of one primer serves as a template for the other primer. Repeated cycles of DNA denaturation, annealing of primers, extension result in an exponential increase in the number of copies of the region bounded by the primers.

Similarly, a labeled segment of single-stranded DNA can be hybridized to a longer DNA sequence, such as a chromosome, to mark a specific location on the longer sequence. Segments of DNA 50 bases long or longer that hybridize to a unique DNA location in the human genome are extremely unlikely to hybridize elsewhere in the human genome.

The Human Genome Project is an effort to sequence all human DNA (the human genome). The human genome is estimated to comprise 50,000 - 100,000 genes, up to 30,000 of which might be expressed in the brain (Sutcliffe, Ann. Rev. Neurosci. 11:157 (1988)). Once dedicated human chromosome sequencing begins in three to five years, it was expected that 12-15 years will be required to complete the sequence of the genome (Report of the Ad Hoc Program Advisory Committee on Complex Genomes, Reston, Va., Feb. 1988, D. Baltimore Ed. (NIH, Bethesda, Md, 1988)). At that rate, the majority of

-6-

human genes would remain unknown for at least the next decade. The present invention can greatly accelerate the pace at which human genes can be identified and mapped. Most gene researchers, in conjunction with publication of their results in this field, submit sequence data to the GenBank database. Prior to the present invention, GenBank listed the sequences of only a few thousand human genes and less than two hundred human brain mRNAs (GenBank Release 66.0, December, 1990).

10

15

20

5

The role of sequencing complementary DNA (cDNA), reverse transcribed from mRNA, as a part of the human genome project has been vigorously debated since the idea of determining the complete nucleotide sequence of humans first surfaced. coding sequence of all human genes represents most of the information content of the genome, but only 3-5% of the total In contrast, cDNA (which is only made from the DNA. transcription product of active genes) is one-half to three-(the remainder being 5'and 3'-untranslated sequence) meaningful genetic information. Thus, some have argued that cDNA sequencing should take precedence over genomic sequencing (Brenner, CIBA Found. Symp. 149:6 (1990)). However, until now, such arguments have not been heeded.

. 25

30

35

of finding every mRNA expressed in all tissues, cell types, and developmental states, and that much valuable information from intronic and intergenic regions, including control and regulatory sequences, will be missed by cDNA sequencing. (Report of the Committee on Mapping and Sequencing the Human Genome, National Research Council (National Academy Press, Washington, D.C. 1988)). Further, sequencing of transcribed regions of the genome using cDNA libraries has heretofore been considered impractical or unsatisfactory. Libraries of cDNA were believed to be dominated by repetitive elements, mitochondrial genes, ribosomal RNA genes, and other nuclear genes comprising common or housekeeping sequences. It was believed that cDNA libraries would provide few sequences

Genomic sequencing proponents have argued the difficulty

10

15

20

25

30

35

corresponding to structural and regulatory polypeptides or peptides. See, for example, Putney, et al., Nature 302:718-721 (1983). Putney, et al. sequenced over 150 clones from a rabbit muscle cDNA library and identified clones for 13 of the 19 known muscle polypeptides, including one new isotype but no unknown coding sequences.

Another perceived drawback of cDNA sequencing was that some mRNAs are abundant, and some are rare. The cellular quantities of mRNA from various genes can vary by several orders of magnitude. This led critics to believe that most information obtained from cDNA sequencing would be repetitious and useless.

The present invention demonstrates that, despite such skepticism, cDNA sequencing now provides a rapid method for obtaining enormous amounts of valuable genetic information and DNA products of great utility for the biotechnology and pharmaceutical industries. Not only can many distinct cDNAs be isolated and sequenced, even partial cDNAs can be used, with conventional, well-understood methods, to isolate entire genes, and to determine the chromosomal locations and biological functions of these genes. As is demonstrated here, fragments of only a few hundred bases are sufficient, in many cases, to identify the probable function of a new human gene if it is similar in structure to a gene from another animal, or from plants or bacteria. Similarly, even fragments of untranslated regions of a cDNA can be used to: i) isolate the coding sequence of the cDNA; ii) isolate the complete gene; iii) determine the position of the gene on a human chromosome, and hence the potential of the gene to cause a human genetic disease; and iv) determine the function of the gene by means of experiments in which the function of the native gene is disrupted by the addition of a short DNA fragment to the cell, e.g., using triple helix or antisense probes.

Because coding regions comprise such a small portion of the human genome, identification and mapping of transcribed

-8-

regions and coding regions of chromosomes is of significant There is a corresponding need for reagents for identifying and marking coding regions and transcribed regions of chromosomes. Furthermore, such human sequences are valuable for chromosome mapping, human identification, identification of tissue type and origin, identification, and locating disease-associated genes (i.e., genes that are associated with an inherited human disease, mutation, deletion, whether through or faulty expression) on the chromosome.

5

10

15

20

25

3Ò

35

#### SUMMARY OF THE INVENTION

Contrary to the expectations of the scientific community, cDNA screening and sequencing techniques have now been used to discover a large number of heretofore unknown human genes. Disclosed herein are over 2,400 new human polynucleotide sequences. These sequences could represent up to 5% of all human genes. The novelty of these sequences has been established through comparison to both nucleotide sequence databases and amino acid sequence databases. Surprisingly, over 80% of the sequences generated were unrelated to any sequences previously described in the literature.

The sequences of the present invention were ascertained using a fast approach to cDNA characterization. This approach could facilitate the tagging of most expressed human genes within a few years at a fraction of the cost of complete genomic sequencing, provide new genetic markers, provide new DNA-based therapeutics and diagnostics, and provide other valuable nucleotide reagents.

The sequences disclosed herein, styled Expressed Sequence Tags ("ESTs"), are markers for human genes actually transcribed in vivo. Techniques are disclosed for using these ESTs to obtain the full coding region of the corresponding gene. The use of ESTs, complete coding sequences, or fragments thereof for marking chromosomes, for

10

15

20

25

30

35

mapping locations of expressed genes on chromosomes, for individual or forensic identification, for mapping locations of disease-associated genes, for identification of tissue type, and for preparation of antisense sequences, probes, and constructs is discussed in detail below. Unlike the random genomic DNA sequence tagged sites (STSs) (Olson et al., Science 245:1434 (1989)), ESTs point directly to expressed genes.

Various aspects of the present invention thus include the individual ESTs, corresponding partial and complete cDNA, genomic DNA, mRNA, antisense strands, triple helix probes, PCR primers, coding regions, and constructs. Also, where one skilled in the art is enabled by this specification to prepare expression vectors and polypeptide expression products, they are also within the scope of the present invention, along with antibodies, especially monoclonal antibodies, to such expression products.

#### BRIEF DESCRIPTION OF THE DRAWING

The single drawing Figure schematically illustrates the progression from chromosome to gene to mRNA to cDNA.

#### DETAILED DESCRIPTION OF THE INVENTION

The detailed description that follows provides not only the actual sequence of each new EST, but also explains how the ESTs were obtained, how to obtain the corresponding complete cDNA sequence and the corresponding genomic DNA sequence, how to make DNA constructs from the ESTs and corresponding sequences, how to use those sequences as reagents in molecular biology and other fields, how to produce gene products from the ESTs and corresponding sequences and antibodies to those gene products, and the functional categories of many ESTs and corresponding genes. Furthermore, numerous actual working examples and predictive

٠--

-10-

examples are provided to demonstrate and exemplify numerous aspects of the invention.  $\mathring{\ }$ 

### I. ESTs from cDNA Libraries

5

10

15

20

25

30

35

The sequences of the present invention were isolated from commercially available and custom made cDNA libraries using a rapid screening and sequencing technique. general, the method comprises applying conventional automated DNA sequencing technology to screening clones, advantageously randomly selected clones, from a cDNA library. Preferably, the library is initially "enriched" through removal of ribosomal sequences and other common sequences prior to clone According to the present method, ESTs are generated from partial DNA sequencing of the selected clones. The ESTs of the present invention were generated using low redundancy of sequencing, typically a single sequencing While single sequencing reactions may have an reaction. accuracy as low as 97%, this nevertheless provides sufficient fidelity for identification of the sequence and design of PCR primers.

Most human genes can be identified by EST sequencing from libraries of cDNA copies of messenger RNAs. However, some genes are expressed only at specific times during embryonic development, or only in small amounts in a few specific cell types. Other genes have mRNAs that are degraded very quickly by the cell in which they are expressed. If any of these are the case, transcripts of the gene will not be represented in cDNA libraries so the gene will not be identifiable by EST sequencing. A new method called "exon amplification", however, can be used to isolate and identify transcripts of such genes.

Exon amplification works by artificially expressing part or all of a gene that is contained in a cloned fragment of genomic DNA such as a cosmid or yeast artificial chromosome (YAC). The gene is cloned into a special vector, designed at MIT, that uses control elements from virus genes to express

5

10

15

20

25

30

35

the protein-coding exons of the human gene of interest. trapping shows considerable promise as a general technique for identifying those genes in the human genome that cannot be found by cDNA cloning and EST sequencing. amplification will also be useful for identifying the genes in regions of genomic DNA to which disease genes have been The exon amplification method can be used directly with the cosmid and YAC clones frown human chromosomes that are being obtained by both NIH and DOE supported human genome ESTs comprise DNA sequences corresponding to a portion of nuclear encoded messenger RNA. An EST is of sufficient length to permit: (1) amplification of the specific sequence from a cDNA library, e.g., by polymerase chain reaction (PCR); (2) use of a synthetic polynucleotide corresponding to a partial or complete sequence of the EST as a hybridization probe of a cDNA library, generally having 30 - 50 base pairs; or (3) unique designation of the pure cDNA clone from which the EST was derived (the EST clone) for use as a hybridization probe of a cDNA library. Preferably, ESTderived primer pairs and sequences amplify or detectably hybridize to a sequence from a genomic library.

It has been found that sufficient information is contained in the 150-400 base ESTs from one sequencing run to effect preliminary identification and exact chromosome mapping. Accordingly, the ESTs disclosed herein are generally at least 150 base pairs in length. The length of an EST is determined by the quality of sequencing data and the length of the cloned cDNA. Raw data from the automated sequencers is edited to remove low quality sequence at the end of the sequencing run. High quality sequences (usually a result of sequencing templates without excessive salt contamination) generally give about 400 bp of reliable sequence data; other sequences give fewer bases of reliable data. A 150 bp EST is long enough to be translated into a 50 amino acid peptide sequence. This length is sufficient to observe similarities when they exist in a database search. Furthermore, 150 bp is

-12-

long enough to design PCR primers from each end of the sequence to amplify the complete EST. Sequences shorter than 150 bp are difficult to purify and use following PCR amplification. Furthermore, a 150 bp polynucleotide is likely to give a very strong signal with low background in a screen of a genomic library.

5

10

15

20

25

30

35

Finally, it is highly unlikely that a sequence of the same 150 bp exists in any genes in the genome besides the one tagged by the EST. Some closely related gene family members have very similar nucleotide sequences, but no examples of pairs of human genes with long segments of identical sequence have been reported to date. For instance, there are three known  $\beta$ -tubulin genes in humans. Several ESTs were found that matched one or another of these tubulin genes, but several new members of this gene family were also found and could be clearly distinguished from the three known members. ESTs that match perfectly to several different genes can be detected by hybridizing to chromosomes: if many chromosomal loci are observed, the sequence (or a close variant) present in more than one gene. This problem can be circumvented by using the 3'-untranslated part of the cDNA alone as a probe for the chromosomal location or for the full-length cDNA or gene. The 3'-untranslated region is more likely to be unique within gene families, since there is no evolutionary pressure to conserve a coding function of this region of the mRNA.

As demonstrated in the Examples that follow, ESTs can be used to map the expressed sequence to a particular chromosome. In addition, ESTs can be expanded to provide the full coding regions, as detailed below. In this manner, previously unknown genes can be identified.

While a variety of cDNA libraries can be used to obtain ESTs, human brain cDNA libraries are exemplified and represent a preferred embodiment. Suitable cDNA libraries can be freshly prepared or obtained commercially, e.g., as shown in Examples 1, 2, and 11. The cDNA libraries from the

desired tissue are preferably preprocessed by conventional techniques to reduce repeated sequencing of high and intermediate abundance clones and to maximize the chances of finding rare messages from specific cell populations. Preferably, preprocessing includes the use of defined composition prescreening probes, e.g., cDNA corresponding to mitochondria, abundant sequences, ribosomes, actins, myelin basic polypeptides, or any other known high abundance peptide; these prescreening probes used for preprocessing are generally derived from known ESTs. Other preprocessing techniques include subtraction. which preferentially reduces the population of certain sequences in the library (e.g., see A. Swaroop et al., Nucl. Acids Res. 19, 1954 (1991)), and normalization, which results in all sequences being represented in approximately proportions in the library (Patanjali et al, Proc. Natl. Acad. Sci. USA 88:1943 (1991)).

5

10

15

20

25

30

35

The cDNA libraries used in the present method will ideally use directional cloning methods so that either the 5' end of the cDNA (likely to contain coding sequence) or the 3' end (likely to be a non-coding sequence) can be selectively obtained."

Libraries of cDNA can also be generated from recombinant expression of genomic DNA. After they are amplified, ESTs can be obtained and sequenced, e.g., as illustrated in Example 11.

The sequences of the present invention include the specific sequences set forth in the Sequence Listing and designated SEQ ID NO: 1 - SEQ ID NO: 2412. In one aspect of this embodiment, the invention relates to those sequences of SEQ ID NOS: 1 - 2412 that comprise the cDNA coding sequences for polypeptides having less than 95% identity with known amino acid sequences (see Table 2) and more preferably less than 90% or 85% identity. In a second aspect, the invention relates to those sequences of SEQ ID NOS: 1 - 2412 that encode polypeptides having no similarity to known amino acid

-14-

sequences (see Examples that follow). Precisely because they do not contain coding regions and are therefore more unique in their sequence structures, those sequences which meet neither of the preceding criteria can be most useful and are generally preferred for mapping.

Consistent with the NIH mission and its responsibilities to disseminate knowledge and share the tangible fruits of its research, the present inventors have taken a number of steps to facilitate sequence data and clone availability. All EST sequences have been submitted to GenBank (representing an addition equivalent to 7% of the human nucleotides in Release 69 of GenBank, September 1991). The corresponding cDNA clones have been submitted to the American Type Culture Collection and information on clones and sequences has been submitted to the Genome Data Base (Pearson, P. Nucl. Acids Res. 19 (Suppl.): 2237-9 (1991)).

#### II. Complete Coding Sequences from ESTs

5

10

15

20

25

30

35

The ESTs of the present invention generally represent relatively small coding regions or untranslated regions of human genes. Although most of these sequences do not code for a complete gene product, the ESTs of the present invention are highly specific markers for the corresponding complete coding regions. The ESTs are of sufficient length that they will hybridize, under stringent conditions, only with DNA for that gene to which they correspond. stringent conditions comprise conditions, for example, where at least 95%, preferably at least 97% or 98% identity (base pairing), is required for hybridization. This property permits use of the EST to isolate the entire coding region and even the entire sequence. Therefore, only routine laboratory work is necessary to parlay the unique EST sequence into the corresponding unique complete sequence.

Thus, each of the ESTs of the present invention "corresponds" to a particular unique human gene. Knowledge

25

30

of the EST sequence permits routine isolation and sequencing of the complete coding sequence of the corresponding gene. The complete coding sequence is present in a full-length cDNA clone as well as in the gene carried on genomic clones. Therefore, each EST "corresponds" to a cDNA (from which the EST was derived), a complete genomic gene sequence, a polypeptide coding region (which can be obtained either from the cDNA or genomic DNA), and a polypeptide or amino acid sequence encoded by that region.

The first step in determining where an EST is located in 10 the cDNA is to analyze the EST for the presence of coding sequence, e.g., as described in Example 14. The CRM program predicts the extent and orientation of the coding region of a sequence. Based on this information, one can infer the presence of start or stop codons within a sequence and 15 whether the sequence is completely coding or completely non-If start or stop codons are present, then the EST can cover both part of the 5'-untranslated or 3'-untranslated part of the mRNA (respectively) as well as part of the coding sequence. If no coding sequence is present, it is likely 20 that the EST is derived from the 3'-untranslated sequence due to its longer length and the fact that most cDNA library construction methods are biased toward the 3' end of the mRNA.

One general procedure for obtaining complete sequences from ESTs is as follows:

- 1. Purify selected human DNA from an EST clone (the cDNA clone that was sequenced to give the EST), e.g., by endonuclease digestion using ECOR1, gel electrophoresis, and isolation of the aforementioned clone by removal from low-melting agarose gel.
- 2. Radiolabel the isolated insert DNA, e.g., with  $^{32}\mathrm{P}$  labels, preferably by nick translation or random primer labeling.
- 35 3. Use the labeled EST insert as a probe to screen a lambda phage cDNA library or a plasmid cDNA library.

- 4. Identify colonies containing clones related to the probe cDNA and purify them by known purification methods.
- 5. Nucleotide sequence the ends of the newly purified clones to identify full length sequences.

5

10

15

20

25

30

35

6. Perform complete sequencing of full length clones by Exonuclease III digestion or primer walking. Northern blots of the mRNA from various tissues using at least part of the EST clone as a probe can optionally be performed to check the size of the mRNA against that of the purported full length cDNA.

An EST is a specific tag for a messenger RNA molecule. The complete sequence of that messenger RNA, in the form of cDNA, can be determined using the EST as a probe to identify a cDNA clone corresponding to a full-length transcript, followed by sequencing of that clone. The EST or the full-length cDNA clone can also be used as a probe to identify a genomic clone or clones that contain the complete gene including regulatory and promoter regions, exons, and introns.

ESTs are used as probes to identify the cDNA clones from which an EST was derived. ESTs, or portions thereof, can be nick-translated or end-labelled with P32 using polynucleotide kinase using labelling methods known to those with skill in the art (Basic Methods in Molecular Biology, L.G. Davis, M.D. Dibner, and J.F. Battey, ed., Elsevier Press, NY, 1986). The lambda library can be directly screened with the labelled ESTs of interest or the library can be converted en masse to pBluescript (Stratagene, La Jolla, California) to facilitate bacterial colony screening. Both methods are well known in the art. Briefly, filters with bacterial colonies containing the library in pBluescript or bacterial lawns containing lambda plaques are denatured and the DNA is fixed to the filters. The filters are hybridized with the labelled probe using hybridization conditions described by Davis et al. The ESTs, cloned into lambda or pBluescript, can be used as positive controls to assess background binding and to adjust

the hybridization and washing stringencies necessary for accurate clone identification. The resulting autoradiograms are compared to duplicate plates of colonies or plaques; each exposed spot corresponds to a positive colony or plaque. The colonies or plaques are selected, expanded and the DNA is isolated from the colonies for further analysis and sequencing.

5

10

15

20

25

30

35

The ESTs can additionally be used to screen Northern blots of mRNA obtained from various tissues or cell cultures, including the tissue of origin of the EST clone. Northern analysis will most often produce one to several positive bands. The bands can be selected for further study based on the predicted size of the mRNA.

Positive cDNA clones in phage lambda are analyzed to determine the amount of additional sequence they contain using PCR with one primer from the EST and the other primer from the vector. Clones with a larger vector-insert PCR product than the original EST clone are analyzed by restriction digestion and DNA sequencing to determine whether they contain an insert of the same size or similar as the mRNA size on a Northern blot.

Once one or more overlapping cDNA clones are identified, the complete sequence of the clones can be determined. The preferred method is to use exonuclease III digestion (McCombie, W.R, Kirkness, E., Fleming, J.T., Kerlavage, A.R., Iovannisci, D.M., and Martin-Gallardo, R., Methods: 3: 33-40, 1991). A series of deletion clones is generated, each of which is sequenced. The resulting overlapping sequences are assembled into a single contiguous sequence of high redundancy (usually three to five overlapping sequences at each nucleotide position), resulting in a highly accurate final sequence.

A similar screening and clone selection approach can be applied to obtaining cosmid or lambda clones from a genomic DNA library that contains the complete gene from which the EST was derived (Kirkness, E.F., Kusiak, J.W., Menninger, J.,

WO 93/16178

5

10

15

20

25

30

35

Gocayne, J.D., Ward, D.C., and Venter, J.C. Genomics 10: 985-995 (1991). Although the process is much more laborious, these genomic clones can be sequenced in their entirety also. A shotgun approach is preferred to sequencing clones with inserts longer than 10 kb (genomic cosmid and lambda clones). In shotgun sequencing, the clone is randomly broken into many small pieces, each of which is partially sequenced. The sequence fragments are then aligned to produce the final contiguous sequence with high redundancy. An intermediate approach is to sequence just the promoter region and the intron-exon boundaries and to estimate the size of the introns by restriction endonuclease digestion (ibid.).

Using the sequence information provided herein, polynucleotides of the present invention can be derived from natural sources or synthesized using known methods. sequences falling within the scope of the present invention are not limited to the specific sequences described, but include human allelic and species variations thereof and portions thereof of at least 15-18 bases. (Sequences of at least 15-18 bases can be used, for example, as PCR primers or as DNA probes.) In addition, the invention includes the entire coding sequence associated with the polynucleotide sequence of bases described in the Sequence Listing, as well as portions of the entire coding sequence of at least 15-18 bases and allelic and species variations thereof. Furthermore, to accommodate codon variability, the invention includes sequences coding for the same amino acid sequences as do the specific sequences disclosed herein. Finally, although the error rate in the automated sequencing used in the present invention is small, there remains some chance of error. Therefore, claims to particular sequences should not be so narrowly construed as to require inclusion of erroneously identified bases or to exclude corrections.

Any specific sequence disclosed herein can be readily screened for errors by resequencing each EST in both directions (i.e., sequence both strands of cDNA).

10

15

20

25

30

35

The sequences, constructs, vectors, clones, and other materials comprising the present invention can advantageously be in enriched or isolated form. As used herein, "enriched" means that the concentration of the material is at least about 2, 5, 10, 100, or 1000 times its natural concentration (for example), advantageously 0.01%, by weight, preferably at least about 0.1% by weight. Enriched preparations of about 0.5%, 1%, 5%, 10%, and 20% by weight are also contemplated. Further, removal of clones corresponding to ribosomal RNA and "housekeeping" genes and clones without human cDNA inserts results in a library that is "enriched" in the desired clones.

The term "isolated" requires that the material be removed from its original environment (e.g., the natural environment if it is naturally occurring). For example, a naturally-occurring polynucleotide present in a living animal is not isolated, but the same polynucleotide, separated from some or all of the coexisting materials in the natural system, is isolated.

It is also advantageous that the sequences be purified form. The term "purified" does not require absolute purity; rather, it is intended as a relative definition. Individual EST clones isolated from a cDNA library have been conventionally purified to electrophoretic homogeneity. The sequences obtained from these clones could not be obtained directly either from the library or from total human DNA. The cDNA clones are not naturally occurring as such, but rather are obtained via manipulation of a partially purified naturally occurring substance (messenger RNA). conversion of mRNA into a cDNA library involves the creation of a synthetic substance (cDNA) and pure individual cDNA clones can be isolated from the synthetic library by clonal selection. Thus, creating a cDNA library from messenger RNA and subsequently isolating individual clones from that library results in an approximately 106-fold purification of the native message. Purification of starting material or

- 200-

natural material to at least one order of magnitude, preferably two or three orders, and more preferably four or five orders of magnitude is expressly contemplated.

In a cDNA library there are many species of mRNA represented. Each cDNA clone can be interesting in its own right, but must be isolated from the library before further experimentation can be completed. In order to sequence any specific cDNA, it must be removed and separated (i.e. isolated and purified) from all the other sequences. This can be accomplished by many techniques known to those of skill in the art. These procedures normally involve identification of a bacterial colony containing the cDNA of interest and further amplification of that bacteria. Once a cDNA is separated from the mixed clone library, it can be used as a template for further procedures such as nucleotide sequencing.

Although claims to large numbers of ESTs and corresponding sequences are presented herein, the invention is not limited to these particular groupings of sequences. Thus, individual sequences are considered as applicants' discoveries or inventions, as are subgroupings of sequences. All of the functional subgroupings set forth in the tables define groupings for which separate claims are contemplated as being within the scope of this invention. Moreover, in addition to claims to individual clones, it is intended that the present disclosure also support claims to numerical subgroupings. Thus, subgroupings of 50 **ESTs** corresponding sequences) are contemplated (e.g., SEQ ID NOS 1-50, 51-100, 101-150, etc.) as being within the scope of this invention, as are subgroupings of 5, 10, 25, 100, 200, and 500 ESTs and corresponding sequences.

#### III. <u>DNA Constructs</u>

5

10

15

20

25

30

35

The present invention also includes recombinant constructs comprising one or more of the sequences as broadly described above. The constructs comprise a vector, such as

10

15

20

25

.30

35

a plasmid or viral vector, into which a sequence of the invention has been inserted, in a sense or antisense orientation. In a preferred aspect of this embodiment, the construct further comprises regulatory sequences, including for example, a promoter, operably linked to the sequence. Large numbers of suitable vectors and promoters are known to those of skill in the art, and are commercially available. The following vectors are provided by way of example. Bacterial: pBs, phagescript, \$\phi\$X174, pBluescript SK, pBs KS, pNH8a, pNH16a, pNH18a, pNH46a (Stratagene); pTrc99A, pKK223-3, pKK233-3, pDR540, pRIT5 (Pharmacia).

Eukaryotic: pWLneo, pSV2cat, pOG44, pXT1, pSG (Stratagene); pSVK3, pBPV, pMSG, pSVL (Pharmacia).

Promoter regions can be selected from any desired gene using CAT (chloramphenicol transferase) vectors or other vectors with selectable markers. Two appropriate vectors are pKK232-8 and pCM7. Particular named bacterial promoters include lacI, lacZ, T3, T7, gpt, lambda  $P_R$ , and trc. Eukaryotic promoters include CMV immediate early, HSV thymidine kinase, early and late SV40, LTRs from retrovirus, and mouse metallothionein-I. Selection of the appropriate vector and promoter is well within the level of ordinary skill in the art.

In a further embodiment, the present invention relates to host cells containing the above-described construct. The host cell can be a higher eukaryotic cell, such as a mammalian cell, or a lower eukaryotic cell, such as a yeast cell, or the host cell can be a procaryotic cell, such as a bacterial cell. Introduction of the construct into the host cell can be effected by calcium phosphate transfection, DEAE dextran mediated transfection, or electroporation (Davis, L., Dibner, M., Battey, I., Basic Methods in Molecular Biology, (1986)).

The constructs in host cells can be used in a conventional manner to produce the gene product coded by the recombinant sequence. Alternatively, the encoded polypeptide

10

15

20

25

30

35

can be synthetically produced by conventional peptide synthesizers.

Certain ESTs have already been preliminarily categorized by analogy to related sequences in other organisms (see Table 2). Table 10 of Example 10 categorizes particular ESTs broadly as metabolic, regulatory, and structural sequences where known. Constructs comprising genes or coding sequences corresponding to each of these categories are, therefore, specifically and individually contemplated.

Table 11 more particularly separates 127 new ESTs into 13 categories using a different criteria. These are genes related to cell surface; developmental control; energy metabolism; kinase and phosphatase; oncogenes; other metabolism-related polypeptides; peptidases and peptidase inhibitors; receptors; structural and cytoskeletal; signal transduction; transporters; transcription, translation, and subcellular localization; and transcription factors. Table 11 further identifies the EST by the particular gene product for which it apparently codes. Each of these categories individually comprises a preferred category of EST, and preferred constructs and resulting polypeptide can be prepared from those ESTs or the corresponding complete gene sequence.

### IV. ESTs and Corresponding Sequences as Reagents

Each of the cDNA sequences identified herein (and the corresponding complete gene sequences) can be used in numerous ways as polynucleotide reagents. The sequences can be used as diagnostic probes for the presence of a specific mRNA in a particular cell type. In addition, these sequences can be used as diagnostic probes suitable for use in genetic linkage analysis (polymorphisms). Further, the sequences can be used as probes for locating gene regions associated with genetic disease, as explained in more detail below.

The EST and complete gene sequences of the present invention are also valuable for chromosome identification.

Each sequence is specifically targeted to and can hybridize with a particular location on an individual human chromosome. Moreover, there is a current need for identifying particular sites on the chromosome. Few chromosome marking reagents based on actual sequence data (repeat polymorphisms) presently available for marking chromosomal location. The present invention constitutes a major expansion of available chromosome markers. One hundred ESTS have already been mapped to chromosomes. Using the techniques described in Example 5 or 6, the remaining ESTs and the corresponding complete sequences can similarly be mapped to chromosomes. The mapping of ESTs and cDNAs to chromosomes according to the present invention is an important first step in correlating those sequences with genes associated with disease.

5

10

15

20

25

30

35

Briefly, sequences can be mapped to chromosomes by preparing PCR primers (preferably 15-25 bp) from the ESTs. Computer analysis of the ESTs is used to rapidly select primers that do not span more than one exon in the genomic DNA, thus complicating the amplification process. These primers are then used for PCR screening of somatic cell hybrids containing individual human chromosomes. Only those hybrids containing the human gene corresponding to the EST will yield an amplified fragment.

PCR mapping of somatic cell hybrids is a rapid procedure for assigning a particular EST to a particular chromosome. Three or more clones can be assigned per day using a single thermal cycler. Using the present invention with the same oligonucleotide primers, sublocalization can be achieved with panels of fragments from specific chromosomes or pools of large genomic clones in an analogous manner. Other mapping strategies that can similarly be used to map an EST to its chromosome include in situ hybridization, prescreening with labeled flow-sorted chromosomes and preselection by hybridization to construct chromosome specific libraries. Results of mapping ESTs to chromosomal segments are listed in Tables 3 and 4.

Fluorescence in situ hybridization (FISH) of a cDNA clone to a metaphase chromosomal spread can be used to provide a precise chromosomal location in one step. This technique can be used with cDNA as short as 500 or 600 bases; however, clones larger than 2,000 bp have a higher likelihood of binding to a unique chromosomal location with sufficient signal intensity for simple detection. FISH requires use of the clone from which the EST was derived, and the longer the better. 2,000 bp is good, 4,000 is better, and more than 4,000 is probably not necessary to get good results a reasonable percentage of the time. For a review of this technique, see Verma et al., Human Chromosomes: a Manual of Basic Techniques. Pergamon Press, New York (1988).

5

10

15

20

25

30

35

Reagents for chromosome mapping can be used individually (to mark a single chromosome or a single site on that chromosome) or as panels of reagents (for marking multiple sites and/or multiple chromosomes). Reagents corresponding to noncoding regions of the genes actually are preferred for mapping purposes. Coding sequences are more likely to be conserved within gene families, thus increasing the chance of cross hybridizations during chromosomal mapping (see Tables 8 and 9).

Once a sequence has been mapped to a precise chromosomal location, the physical position of the sequence on the chromosome can be correlated with genetic map data. (Such data are found, for example, in V. McKusick, Mendelian Inheritance in Man (available on line through Johns Hopkins University Welch Medical Library).) The relationship between genes and diseases that have been mapped to the same chromosomal region are then identified through linkage analysis (coinheritance of physically adjacent genes).

Next, it is necessary to determine the differences in the cDNA or genomic sequence between affected and unaffected individuals. If a mutation is observed in some or all of the affected individuals but not in any normal individuals, then

10

15

20

25

30

35

the mutation is likely to be the causative agent of the disease.

With current resolution of physical mapping and genetic mapping techniques, a cDNA precisely localized to a chromosomal region associated with the disease could be one of between 50 and 500 potential causative genes. (This assumes 1 megabase mapping resolution and one gene per 20 kb.)

Comparison of affected and unaffected individuals generally involves first looking for structural alterations in the chromosomes, such as deletions or translocations that are visible from chromosome spreads or detectable using PCR based on that cDNA sequence. Ultimately, complete sequencing of genes from several individuals is required to confirm the presence of a mutation and to distinguish mutations from polymorphisms.

In addition to the foregoing, the sequences of the invention, as broadly described, can be used to control gene expression through triple helix formation or antisense DNA or RNA, both of which methods are based on binding of a polynucleotide sequence to DNA or RNA. Polynucleotides suitable for use in these methods are usually 20 to 40 bases in length and are designed to be complementary to a region of the gene involved in transcription (triple helix - see Lee et al, Nucl. Acids Res. 6: 3073 (1979); Cooney et al, Science 241: 456 (1988); and Dervan et al, Science 251: 1360 (1991)) or to the mRNA itself (antisense - Okano, J. Neurochem. 56: 560 (1991); Oligodeoxynucleotides as Antisense Inhibitors of Gene Expression, CRC Press, Boca Raton, FL (1988)). helix formation optimally results in a shut-off of RNA transcription from DNA, while antisense RNA hybridization blocks translation of an mRNA molecule into polypeptide. Both techniques have been demonstrated to be efficient in model systems. Information contained in the sequences of the present invention is necessary for the design of an antisense or triple helix oligonucleotide.

---

The present invention is also useful tool in gene therapy, which requires isolation of the disease-associated gene in question as a prerequisite to the insertion of a normal gene into an organism to correct a genetic defect. He high specificity of the cDNA probes according to this invention have promise of targeting such gene locations in a highly accurate manner.

5

10

15

20

25

30

35

The sequences of the present invention, as broadly defined, are also useful for identification of individuals from minute biological samples. The United States military, for example, is considering the use of restriction fragment length polymorphism (RFLP) for identification of its personnel. In this technique, an individual's genomic DNA is digested with one or more restriction enzymes, and probed on a Southern blot to yield unique bands for identifying personnel. This method does not suffer from the current limitations of "Dog Tags" which can be lost, switched, or stolen, making positive identification difficult. The sequences of the present invention are useful as additional DNA markers for RFLP.

However, RFLP is a pattern based technique, which does not directly focus on the actual DNA sequence of the individual. The sequences of the present invention can be used to provide an alternative technique that determines the actual base-by-base DNA sequence of selected portions of an individual's genome. These sequences can be used to prepare PCR primers for amplifying and isolating such selected DNA. One can, for example, take an EST of the invention and prepare two PCR primers from the 5' and 3' ends of the EST. These are used to amplify an individual's DNA, corresponding to the EST. The amplified DNA is sequenced.

Panels of corresponding DNA sequences from individuals, made this way, can provide unique individual identifications, as each individual will have a unique set of such DNA sequences, due to allelic differences. The sequences of the present invention can be used to particular advantage to

5

10

15

20

25

30

35

-27-

obtain such identification sequences from individuals and from tissue, as explained in Examples 12 - 14.

The EST sequences from Examples 1 and 2 and the complete sequences from Example 13 uniquely represent portions of the human genome. Allelic variation occurs to some degree in the coding regions of these sequences, and to a greater degree in It is estimated that allelic the noncoding regions. variation between individual humans occurs with a frequency of about once per each 500 bases. Each of the ESTs or complete coding sequences comprising a part of the present invention can, to some degree, be used as a standard against which DNA from an individual can be compared identification purposes. Because greater numbers polymorphisms occur in the noncoding regions, fewer sequences are necessary to differentiate individuals. The noncoding sequences of Table 9 for example, could comfortably provide positive individual identification with a panel of perhaps 100 to 1,000 primers which each yield a noncoding amplified sequence of 100 bp. If predicted coding sequences, such as those from Table 6, are used, a more appropriate number of primers for positive individual identification would be 500-2,000.

If a panel of reagents from ESTs or complete sequences of this invention is used to generate a unique ID database for an individual, those same reagents can later be used to identify tissue from that individual. Positive identification of that individual, living or dead can be made from extremely small tissue samples.

Another use for DNA-based identification techniques is in forensic biology. PCR technology can be used to amplify DNA sequences taken from very small biological samples such as tissues, e.g., hair or skin, or body fluids, e.g., blood, saliva, semen, etc. In one prior art technique, gene sequences are amplified at specific loci known to contain a large number of allelic variations, for example the DQ $\alpha$  class II HLA gene (Erlich, H., PCR Technology, Freeman and Co.

5

10

15

20

25

30

35

-28-

(1992)). Once this specific area of the genome is amplified, it is digested with one or more restriction enzymes to yield an identifying set of bands on a Southern blot probed with DNA corresponding to the DQ $\alpha$  class II HLA gene.

The sequences of the present invention can be used to provide polynucleotide reagents specifically targeted to additional loci in the human genome, and can enhance the reliability of DNA-based forensic identifications. sequences targeted to noncoding regions (see, e.g., Tables 8 and 9) are particularly appropriate. As mentioned above, actual base sequence information can be used for identification as an accurate alternative to patterns formed by restriction enzyme generated fragments. Reagents for obtaining such sequence information are within the scope of the present invention. Such reagents can comprise complete ESTs or corresponding coding regions, or fragments of either of at least 15 bp, preferably at least 18 bp.

There is also a need for reagents capable of identifying the source of a particular tissue. Such need arises, for example, in forensics when presented with tissue of unknown origin. Appropriate reagents can comprise, for example, DNA probes or primers specific to particular tissue prepared from the ESTs or complete sequences of the present invention. Panels of such reagents can identify tissue by species and/or by organ type. In a similar fashion, these reagents can be used to screen tissue culture for contamination.

#### V. Production of Polypeptide Corresponding to ESTs

As previously explained, each EST corresponds not only to a coding region, but also to a polypeptide. Once the coding sequence is known, or the gene is cloned which encodes the polypeptide, conventional techniques in molecular biology can be used to obtain the polypeptide.

At the simplest level, the amino acid sequence encoded by the polynucleotide sequence can be synthesized using commercially available peptide synthesizers. This is

particularly useful in producing small peptides and fragments of larger polypeptides. (Fragments are useful, for example, in generating antibodies against the native polypeptide.)

Alternatively, the DNA encoding the desired polypeptide can be inserted into a host organism and expressed. organism can be a bacterium, yeast, cell multicellular plant or animal. The literature is replete with examples of suitable host organisms and expression techniques. For example, naked polynucleotide (DNA or mRNA) can be injected directly into muscle tissue of mammals, where it is expressed. This methodology can be used to deliver the polypeptide to the animal, or to generate an immune response Wolff, et al., against a foreign polypeptide. 247:1465 (1990); Felgner, et al., Nature 349:351 (1991). Alternatively, the coding sequence, together with appropriate regulatory regions (i.e., a construct), can be inserted into a vector, which is then used to transfect a cell. The cell (which may or may not be part of a larger organism) then expresses the polypeptide. (See Example 25.)

Antibodies generated against the polypeptide corresponding to a sequence of the present invention can be obtained by direct injection of the naked polypeptide into an animal (as above) or by administering the polypeptide to an animal, preferably a nonhuman. The antibody so obtained will then bind the polypeptide itself. In this manner, even a sequence encoding only a fragment of the polypeptide can be used to generate antibodies binding the whole native polypeptide. Such antibodies can then be used to isolate the polypeptide from tissue expressing that polypeptide. Moreover, a panel of such antibodies, specific to a large number of polypeptides, can be used to identify and differentiate such tissue.

#### VI. Examples

5

10

15

20

25

30

35

Certain aspects of the present invention are described in greater detail in the non-limiting Examples that follow.

-30-

#### EXAMPLE 1

# <u>Clone Selection: First set</u>

5

10

15

20

25

30

35

#### METHODOLOGY:

With reference to the data presented in Table 1, lambda libraries were converted en masse to pBluescript plasmids, transfected into E. coli XL1-Blue cells, and plated on X-gal/IPTG/ampicillin plates. A total of 1058 clones were picked at random from three human brain cDNA libraries: fetal brain, two-year-old hippocampus, and two-year-old temporal cortex (Stratagene catalog #936206, 936205, 935, Stratagene, 11099 N. Torrey Pines Rd., La respectively. Jolla, CA 92037). An analysis of these clones is summarized in Table I (see below) In addition, clones selected from the hippocampus library were also analyzed after subtractive hybridization with the fibroblast library. These results are listed in the "Hippocampus Subtracted" column of Table 1. Templates for DNA sequencing were PCR products or plasmids prepared by the alkaline lysis method. About half of the templates prepared by PCR failed to yield an amplified fragment suitable for sequencing. This was primarily due to use of PCR conditions that minimized the need for further purification of the product but also selected against amplification of long inserts (5 µl fresh or frozen overnight culture of E. coli carrying the pBluescript plasmid, 7.5  $\mu M$ each dNTP, and 0.1 µM each primer for 35 cycles: 40 sec; 55°C, 40 sec; 72°C, 90 sec). A further percentage of the PCR-generated templates failed to sequence, largely due to primer-dimer or other amplification artifacts. improved the percentage of plasmid templates. increasing the yields of usable sequence from about 60% with a standard alkaline lysis protocol to over 90%. Overall, 117 PCR-generated templates and 497 plasmid templates resulted in usable sequence. Dideoxy chain termination sequencing reactions were performed with fluorescent dye-labeled M13

-31-

universal or reverse primers. After a cycle sequencing protocol, carried out in a Perkin-Elmer thermal cycler, sequencing reactions were run on an Applied Biosystems, Inc. (Foster City, CA) 373A automated DNA sequencer. (Cycle sequencing was performed in a Perkin Elmer Thermal Cycler for 15 cycles of 95°C, 30 sec; 60°C, 1 sec; 70°C, 60 sec and 15 cycles of 95°C, 30 sec; 70°C, 60 sec with the Applied Biosystems, Inc. Taq Dye Primer Cycle Sequencing Core Kit protocol). Some sequencing reactions were performed on an ABI robotic workstation (Cathcart, Nature 347: 310 (1990) hereby incorporated by reference).

#### RESULTS:

5

10

15

20

25 <sup>°</sup>

30

35

Singe-run DNA sequence data were obtained from 609 randomly chosen cDNA clones. The number of clones sequenced from each library is summarized in Table 1. Double-stranded cDNA clones in the pBluescript vector were sequenced by a cycle sequencing protocol with dye-labeled primers and Applied Biosystems, Inc. 373A DNA Sequences. The average length of usable sequence was 397 bases with a standard deviation of 99 bases.

Subtractive hybridization has been used successfully to reduce the population of highly represented sequences in a cDNA library by selectively removing sequences shared by (Schmid and Girou, Neurochem. 48: 307 another library. (1987); Fargnoli et al, Anal. Biochem. 187: 364 (1990); Duguid and Dinauer, Nucl. Acids. Res. 18: 2789 (1990); Schweinfest, et al, Genet. Anal. Techn. Appl. 7: 64 (1990); Travis and Sutcliffe, Proc. Natl. Acad. Sci. USA 85: 1696 (1988); Kato, Eur. J. Neurosci. 2: 704 (1990)). Subtractive hybridization was therefore tested as a way of enhancing the number of brain-specific clones in the hippocampus library by hybridizing the hippocampus library with a WI38 human lung fibroblast cell line cDNA library and removing the common sequences (Schweinfest et al, Genet. Anal. Techn. Appl. 7: 64 (1990); Sive and St. John, Nucl. Acids Res. 16: 10937

(1988)). Clones from this subtraction are listed in the column "Hippocampus Subtracted" in Table 1.

The EST sequences from this Example 1 are identified as SEQ ID NOs 1-315.

TABLE 1. cDNA Library Composition Determined By Random Clone Sequencing

ex Percent	7.5 13.8 0 5.0 7.5 33.7	-33-
Temporal Cortex <u>Number</u>	6 0 1 1 0 0 6 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	
Fetal Brain <u>Percent</u>	7.9 0 0 13.5 52.6 0 0	
Fe	w 40 4 N 00 0	
Subtracted	8 6 6 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	
Hippocampus Subtracted Number	0 4 r r r 4 4 8 u	
npus Percent	5.0 5.0 5.0 5.0 8.0 5.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8	
Hippocampus Number	53 53 53 53 53	
EST Category	Databases MatchKuman Mitochondrial Genes Repeats: Alu, Line-1, etc Ribosomal RNA Otther Wuclear Genes Database MatchOther No Database Match poly A Insert No Insert	

10

15

20

25

30

#### EXAMPLE 2

### Sequencing of Additional ESTs: Second set

Over 2600 additional cDNA clones have been isolated, partially sequenced and screened. The clones were isolated from four human brain cDNA libraries. The new sequences thus discovered, together with the 315 brain ESTs from Example 1, correspond to over 2400 new human genes. These data represent an approximate doubling of the number of human genes identified by DNA sequencing.

Specifically, four cDNA libraries were used as sources of clones for sequencing. Human hippocampus and fetal brain libraries, plasmid template preparation, sequencing and automated sequencing were performed as reactions, described (Adams, M.D., Kelley, J.M., Gocayne, J.D., Dubnick, M., Polymeropoulos, M.H., Xiao, H., Merril, C.R., Wu, A., Olde, B., Moreno, R.F., Kerlavage, A.R., McCombie, W.R., & Venter, J.C. Science, 252: 1651-56 (1991)). A pooled probe consisting of inserts from 10 different EST clones with sequences that matched either mitochondrial genes or the 18S or 28S ribosomal RNAs was used to prescreen a gridded filter array of the hippocampus library; nonhybridizing clones are referred to as the "prescreened library". Another fetal brain library was constructed by and was a gift from Bento Soares (Columbia University). A directionally-cloned library was prepared using the method of Rubenstein, et al. (Rubenstein, J., Elizabeth, A., Brice, A., Ciaranello, R., Denney, D., Porteus, M. & Usdin, T. Nucl. Acids Res. 18: 4833-4842) using human adult brain mRNA purchased from Clontech (Palo Alto, CA; Catalogue # 6516-1). Of 482 clones analyzed by restriction enzyme digestion, 33% contained inserts at least 1500 base pairs in length. Stratagene hippocampus and fetal brain library totals include data from Adams et al Science 252: 1651.

Sequences of nuclear-encoded cDNAs that did not include interspersed repeats (Schmid, C. W. & Jelinek, W. R. Science

10

15

20

25

30

216: 1065-1070 (1982); Paulson, K. E., Deka, N., Schmid, C. W., Misra, R., Schlinder, C. W., Rush, M. G., Kadyk, L., & Leinwand, L. Nature 316: 359-361 (1985); Fanning, T. G. & Biochem. Biophys. Acta 910: 203-212 (1987)) Singer, M. F. were searched against all of GenBank and, translation, against a comprehensive, non-redundant peptide database using the network BLAST (Altschul, S. F., Gish, W., Miller, W., Myers, E.W., & Lipman, D. J. Mol. Biol. 215: (1990)) 403-410 server at the National Center Biotechnology Information. BLAST output was parsed, and an interactive alignment editor was used to select which matches, if any, from each search to record in a relational EST database, which was developed to track sequencing, identification, tissue localization, physical mapping, and the public distribution of the clones, mapping and sequence data. For significant similarities, a putative gene name and Protein Identification Resource (PIR) gene · family identification (Barker, W., George, D., Hunt, L., Garavelli, J. Nucl. Acids Res. 19 (Suppl): 2231-2236 (1991)) for the EST were assigned. ESTs without significant matches using BLAST were searched in translation against PIR using FASTA. Ten additional marginal matches were found. A total of 2300 new EST sequences comprising 765,505 nucleotides from the current data set have been submitted to GenBank and assigned accession numbers M77851-M79278 and M85308-M86179. All ESTs except those multiply representing actin, tubulin, and myelin basic protein clones were submitted. accession numbers of cDNA clones from which ESTs were derived are 77501-78999 and 81000-81756. The Genome Data Base expressed D-segment numbers for these clones are DOS1E -D0S2422E. The ESTs from this Example are identified herein as SEQ ID NOs 316-2407.

- 3.6 -

#### EXAMPLE 3

# EST Characterization: First Set

5

10

15

20

25

30

35

ESTs including SEQ ID NOs 1-315 were analyzed as Initially, the EST sequences were examined for follows. similarities in the GenBank nucleic acid database (GenBank Release 65.0), Protein Information Resource Release 26.0 (PIR), and ProSite (MacPattern from the EMBL data library. Fuchs R. Comput. Appl. Biosci. 7: 105 (1990) Release 5.0 were used). BLAST was used to search Genbank and the PIR (both maintained by the National Center for Biotechnology ESTs without exact GenBank matches were Information) translated in all six reading frames and each translation was compared with the protein sequence database PIR and the ProSite protein motif database. Comparisons with the ProSite motif database were done by means of the program MacPattern from the EMBL Data Library. GenBank and PIR searches were conducted with the "basic local alignment search tool" programs for nucleotide (BLASTN) and peptide comparisons (Altschul et al, J. Mol. Biol. 215: 403 (1990)). PIR searches were run on the National Center Biotechnology Information BLAST network service. The BLAST programs contain a very rapid database-searching algorithm that searches for local areas of similarity between two sequences and then extends the alignments on the basis of defined match and mismatch criteria. The algorithm does not consider the potential gaps to improve the alignment, thus sacrificing some sensitivity for a 6-80 fold increase in speed over other database-searching programs such as FASTA (Peqarson and Lipman, Proc. Natl. Acad. Sci. USA, 85: 2444 (1988)).

Sequence similarities identified by the BLAST programs were considered statistically significant with a Poisson P-value than 0.01. The Poisson P-value less than the probability of as high a score occurring by chance given the number of residues in the query sequence and the database.

-37-

After the BLASTN search, 30 unmatched ESTs were compared against GenBank by FASTA to determine if significant matches were missed due to the use of BLASTN for the database search. No additional statistically significant matches were found. Statistical significance does not necessarily mean functional similarity; some of the reported matches may indicate the presence of a conserved domain or motif or simply a common protein structure pattern. Those ESTs identified as fully corresponding to known human genes or proteins are not included in this disclosure. Statistically significant matches are reported in Table 2, together with the length and percent identity or similarity of each alignment.

5

10

15

20

25

30

35

On the basis of database searches, 609 EST sequences were classified into eight groups as shown in Table 1 (see Example 1 above). Four groups, with 197 or 32% of the sequences, consist of matches to human sequences: repetitive elements, mitochondrial genes, ribosomal RNA genes, and other nuclear genes. Forty-eight (8%) of the sequences matched non-human entries in GenBank or PIR while 230 (38%) had no significant matches. The remaining 134 (22%) sequences contained no insert or consisted entirely of polyA between the EcoRI cloning sites.

Thirty-six ESTs matched previously sequenced human nuclear genes with more than 97% identity. Four of these ESTs are from genes encoding enzymes involved in maintaining metabolic energy, including ADP/ATP translocase, aldolase C, hexokinase, and phosphoglycerate kinase. Human homologs of genes for the bovine mitochondrial ATP synthase  $F_0 \mbox{$\mathbb{S}$-subunit}$ and porcine aconitase were also found (Table 2). specific cDNAs included synaptophysin, glial fibrillary acidic protein (GFAP), and neurofilament light chain. least six ESTs are from genes encoding proteins involved in transduction: 2',3'-cyclic nucleotide phosphodiesterase (2 ESTs), calmodulin, c-erbA- $\alpha$ -2,  $G_S\alpha$ , and  $\text{Na}^+/\text{K}^+$  ATPase  $\alpha\text{-subunit}$ . Other ESTs were matches to genes for ubiquitous structural proteins -- actins, tubulins, and WO 93/16178

5

10

15

20

25

30

35

fodrin (non-erythroid spectrin). ESTs also document the presence in the hippocampus cDNA library of the ret proto-oncogene, the ras-related gene rhoB, and one of the chromosome 22 breakpoint cluster region transcripts. Eight ESTs are from genes known to be associated with genetic disorders (Online Mendelian Inheritance in Man). More than half of the human-matched ESTs from Example 1 have been mapped to chromosomes, indicating the bias of GenBank entries toward well-studied genes and proteins.

ESTs without significant GenBank matches were also compared to the ProSite database of recognized protein motifs. Not counting post-translational-modification signatures, fifty-four sequences contained motifs from the database. Some patterns, particularly the "leucine zipper", are found in scores or hundreds of proteins that do not share the functional property implied by the presence of the motif.

Similarities to sequences from other organisms were also detected in the BLAST searches of GenBank and PIR (Table 2). Several ESTs displayed similarity to "housekeeping" genes, including the ribosomal proteins S10 and L30 (rat) and the above glycolytic enzymes. EST00257 (SEQ ID NO:77) shows strong nucleotide sequence similarity to the squid (67%) and Drosophila (70.4%) kinesin heavy chain. Kinesin was first described as a microtubule-associated motor protein involved in organelle transport in the squid giant axon (Vale et al, Cell 42: 39 (1985)). Six oncogene-related sequences were also among the cDNA clones sequenced. EST00299 (SEQ ID NO:180) and EST00283 (SEQ ID NO:271) show similarity to several ras-related genes and EST00248 (SEQ ID NO:102) matched the 3' untranslated region of the bovine substrate of botulinum toxin ADP-ribosyltransferase. Similarities with an S. cerevisiae RNA polymerase subunit and Torpedo electromotor neuron-associated protein were also observed. Two ESTs may represent new members of known human gene families: EST00270 matched the three ß-tubulin genes with 88-91% identity and

5

10

15

20

25

30

35

-39-

EST00271 (SEQ ID NO:248) matched  $\alpha$ -actinin with 85% identity at the nucleotide level.

Among the most interesting of the primary sequence relationships was the similarity of ESTs to the Drosophila genes Notch and Enhancer of split. Nucleotide and peptide alignments of EST00256 (SEQ ID NO:188) and EST00259 (SEQ ID NO:227) with the Drosophila genes have been demonstrated. Both genes are part of a signal cascade encoded by the "neurogenic" genes that are involved in the differentiation of neuronal and epidermal cell lineages in the neuroectoderm of the developing Drosophila embryo (Campos-Ortega, Trends in Neuro. Sci. 11: 400 (1988)). It has been proposed that the Enhancer of split protein interacts with a membrane protein that is the product of the Notch gene to convert a developmental signal into an altered pattern of gene expression (id. J. Mol. Biol. 215: 403 (1990)). (SEQ ID NO:188) matches near the 5' end of the Enhancer of split coding sequence, away from the mammalian G protein & subunit- and yeast cdc4-like elements (Hartley et al, Cell 55: 785 (1988); Klambt et al. EMBO J. 8: 203 (1989)). Part of the EST00259 (SEQ ID NO:227) match to Notch in the cdc10/SW16 region that is similar to three cell-cycle control genes in yeast and is tightly conserved in the Xenopus Notch homolog, Xotch. In Drosophila, Enhancer of split is absolutely required for formation of epidermal tissue. Notch contains several epidermal growth factor-like repeats and appears to play a general role in cell-cell communication during development (Banerjee and Zipursky, Neuron 4:177 (1990)).

Seven genes were represented by more than one EST. Comparisons of all the ESTs against one another revealed two overlaps of unknown ESTs: EST00233 (SEQ ID NO:32) and EST00234 (SEQ ID NO:8) match in opposite orientations and EST00235 (SEQ ID NO:204) and EST00236 (SEQ ID NO:148) match in the same orientation beginning at the same nucleotide. Five human genes were represented by more than one EST: \$\mathcal{E}\$-

10

15

20

25

30

actin (3),  $\lambda$ -actin (2),  $\alpha$ -tubulin (2),  $\alpha$ -2-macroglobulin (2), and 2'3'-cyclic-nucleotide-3'-phosphodiesterase (2). Those few instances where two or more ESTs represent different portions of a single cDNA can be readily ascertained when the sequence of the full cDNA insert is determined in accordance with Example 13.

# Example 4

# EST Sequences Characterization: Second Set

The ESTs of Example 2, including SEQ ID NOs 316-2407, were screened against known sequences listed in GenBank and other databases, as in Example 3. The results are reported in Table 2. The quality of the match is given as percent identity and length in base pairs for nucleotide matches and amino acid residues for peptide matches. In many cases ESTs match multiple domains on several related proteins; for example, EST00825 matches two transmembrane domains on both GABA and Norepinephrine transporters. Nucleotide databases are: GenBank (GB), and EMBL (E); peptide databases are: GenPept (GPU), Swiss-Prot (SP), and PIR.

The great majority (83%) of the partial cDNA sequences reported in Example 2 are unrelated to any sequences previously described in the literature. Based on database matches to known genes from humans as well as from such evolutionarily distant organisms as E. coli, yeast, C. elegans, Drosophila, barley, Arabidopsis, rice, and green algae, we have preliminarily identified the functional type of a number of the ESTs (Table 2). These include a novel gene similar to Notch/Tan-1 (Adams et al., supra), a new neurotransmitter transporter gene, and a new member of the multi-drug resistance gene family. Several genes involved in development or cell differentiation in Drosophila are represented by similar human ESTs, including seven in absentia (Carthew, R. & Rubin, G. Cell 63: 561-577 (1990)),

big-brain (bib) (Rao, Y., Jan, L., & Jan, Y. Nature 345: 163-167 (1990)), the discs tumor suppressor (Woods, D. & Bryant, P. Cell 66: 1-20 (1991)), and the homeotic gene orthodenticle (Finkelstein, R., Smouse, D. Capaci, T., Spradling, A. & Perrimon, N. Genes. Dev. 4: 1516-1527 (1990)). New members of gene families previously known in humans include a Ca<sup>+2</sup>-transporting ATPase, an ADP ribosylation factor, and a new neural-cell adhesion molecule gene.

The 1971 ESTs without a putative identification were analyzed using the coding-region prediction program CRM via the GRAIL server (Uberbacher, E. & Mural, R. Proc. Natl. Acad. Sci. USA 88: 11261-5 (1991)). Fifteen percent of the unknown ESTs scored an excellent probability of containing protein-coding sequence. Fifty percent of the ESTs to known human genes contain protein-coding sequences, therefore, at most half of the unknown ESTs are likely to contain coding sequences. We have found no evidence that genomic DNA or cDNA to unspliced precursor RNA is a major contaminant of either the hippocampus or fetal brain library.

Table 2: ESTs Identified by Database Matches

2020 EST00250 60K filarial antigen   A28209 PIR 108 56.9	SEQ ID EST# Putative Identification	Accession DB Len %ID
2320 EST01784 60K filarial anigen   A28209 FIR 88 50.6		A28209 PIR 108 56.9
969 EST01982 ADP-ribosylation factor 1   833283 PIR 84 41.2     1834 EST01620 AMP deaminase, brain		
1834 EST001620 AMP deaminase, brain   A37056   PIR 57 100.0		· · · · · · · · · · · · · · · · · · ·
97 ESTO0289 Aconitase 28 EST00270 Actinin, other 28 EST00271 Actinin, alpha 391 EST01891 Actinin, alpha 391 EST01891 Actinin, alpha 392 EST00110 Agrin 393 EST00120 Agrin 394 EST00253 Actinin, alpha 394 EST00253 Actinin, alpha 395 EST00110 Agrin 396 EST00110 Agrin 397 EST00640 Amyloid Ad 398 EST001644 Amyloid Ad 398 EST001644 Amyloid Ad 398 EST01669 Amyloid Ad 398 EST01694 Amyloid Ad 398 EST01694 Amyloid Ad 398 EST01694 Amyloid Ad 398 EST00230 B cell-specific Mo-MLV integration site 1 (bmi-1) MUSBMITA 398 EST00230 B Bib protein 398 EST00231 CAMP-dependent protein kinase inhibitor 398 EST00141 CAMP-regulated phosphoprotein 399 EST00244 CAMP-specific phosphodiesterase 390 EST01443 CDPdiacylglycerol-serine O-phosphatidyltransferase JH0368 391 EST01665 Calicium channel 391 EST01665 Cotilin 392 EST01666 Calimodulin dependent protein kinase, type II, beta A26464 393 EST01665 Cotilin 393 EST01665 Cotilin 394 EST01665 Cotilin 395 EST01665 Cotilin 396 EST01666 Calimodulin-dependent protein kinase, type II, beta A26464 396 EST01676 Cotilin 397 EST00255 Calcium channel 398 EST00265 Cotilin cat assembly protein AP50 homolog 399 EST01779 Discs-large tumor suppressor 390 EST01779 Discs-large tumor suppressor 391 EST001325 Farthy acid synthase 310 EST00325 G Ab binding protein, beta subunit infectonodrial 392 EST01325 Farthy acid synthase 310 EST00373 G Ab binding protein, beta subunit infectonodrial 392 EST01335 GAB binding protein, beta subunit infectonodrial 393 EST00325 G Ab binding protein, beta subunit infectonodrial 394 EST00346 Glutamate-aspartate carrier protein 395 EST00346 Glutamate-aspartate carrier protein 396 EST00346 Glutaminase 397 PIR 36 73.3 398.9 398.9 399 EST00355 Calcium channel 399 EST00355 Calcium channel 390 EST00375 Forthy acid synthase 390 EST00375 Forthy acid synthase 390 EST00375 Forthy acid synthase 390 EST00376 Forthy acid synthase 391 EST00346 Glutaminase 391 EST00346 Glutaminase 392 EST00346 Glutaminase 393 EST00346 Glutaminase Suppressor 394 EST00450 Glutaminase 395 EST00450 Glutaminase 396 EST		
251 EST00370   Actin, other   248 EST00271   Actinin, alpha   HUMACTAR   GB   271   75.0		
### STOO271 Actinin, alpha ### ACTAR   GB   271   85.3   ### STO1891 Actinin, alpha   HUMACTAR   GB   271   75.0   ### STO0110 Agrin   RATAGR   GB   271   75.0   ### STO0110 Agrin   RATAGR   GB   271   75.0   ### STO0113 Ala   HUMACTAR   GB   271   75.0   ### STO02113 Ala   HUMALA   GB   269   82.2   ### STO02113 Ala   HUMALA   GB   92   82.8   ### STO02113 Ala   HUMALA   GB   92   82.8   ### STO02113 Ala   HUMALA   GB   92   82.8   ### STO0244 Amyloid A4   HUMALA   GB   92   82.8   ### STO01664 Amyloid A4   HUMALA   GB   92   82.8   ### STO1665 EST01664 Amyloid A4   HUMALA   HUMAL		
B31 ESTO1891   Actinin, alpha   HUMACTAR   GB   271   75.0		
1500 EST02538   Actinin, alpha   HUMACTAR   GB   269   82.2     1852 EST016125   Agrin   RATAGR   GB   103   84.6     1094 EST02113   Ala   HUMALA   GB   92   82.8     691 EST00675   Alcohol dehydrogenase   RICGOS2G   1 GPU   38   59.0     1965 EST01664   Amyloid A4   Amyloid A4   Avoid A4   Avoid A4   Alabaman   Amyloid A4   Alabaman   Alabaman   Amyloid A4   Alabaman   Alabaman   Amyloid A4   Alabaman   Amyloid A4   Alabaman		
132 EST00110 Agrin		
1852 EST01625 Agrin		
1094 EST02113 Ala		
BST00675		
2408 EST00244 Amyloid A4		
1965   EST01664   Amyloid A4		
2068 EST01694		
2092 EST01700   Anion exchanger homolog AE3   A33638   PIR   95   97.9		
1880 EST01634		
1492 EST02530   B cell-specific Mo-MLV integration site 1 (bmi-1)   MUSBMI1 A   GB   111   87.5     1277 EST02306   Bib protein   S09699   PIR   57   53.4     13 EST00255   Cadherins   CADN\$HUMAN   SP   41   45.2     1348 EST02378   CAMP-dependent protein kinase inhibitor   MUSPKI   GB   234   91.5     1931 EST01041   CAMP-regulated phosphoprotein   B35308   PIR   21   86.4     1413 EST02447   CAMP-specific phosphodiesterase   HUMPDEAA   GB   363   69.0     396 EST01443   CDPdiacytglycerol-serine O-phosphatidyltransferase   JH0368   PIR   33   41.2     1956 EST01663   Ca2++transporting ATPase 2   B28065   PIR   125   88.9     1126 EST02146   Calbindin D28   RATCALBD28   GB   81   87.8     1039 EST02055   Calcium channel   S05054   PIR   33   67.6     1910 EST01645   Calmodulin   Calmodulin   RATRCM1   GB   120   90.1     485 EST01466   Calmodulin-dependent protein kinase, type II, beta   A26464   PIR   93   98.9     193 EST01913   Clathrin coat assembly protein   AP50 homolog   YSCYAP54   1   GPU   62   63.5     2004 EST01824   Cysteine-rich intestinal protein   GYRTI   PIR   56   66.7     1588 EST02633   D2223 repetitive DNA   HUMREP   GB   160   76.4     2192 EST01257   Diacytglycerol kinase, lymphyocyte   S09156   PIR   44   42.2     1441 EST02477   Diamine acetyltransferase   ATDA\$HUMAN   SP   74   45.3     650 EST00642   Dilute (myosin heavy chain)   MUSDILUTE   GPU   27   100.0     2302 EST01779   Discs-large tumor suppressor   DRODLGA   1   GPU   53   63.0     188 EST00256   CAD binding protein, beta subunit   MUSGAC   1   GPU   86   90.8     1667 EST00825   Gamma-aminobutyric acid transporter   A35918   PIR   26   59.3     1412 EST02446   Glutamate-aspartate carrier protein   GLS*RAT   SP   34   74.3     1000 EST0034   Glutaminase   GLS*RAT   SP   34   74.3	1880 EST01624 Avenal chaperate TAC 1	
1277   EST02306   Bib protein   S09699   PIR   57   53.4     13   EST00255   Cadherins   CADN\$HUMAN   SP   41   45.2     1348   EST02378   CAMP-dependent protein kinase inhibitor   B35308   PIR   21   86.4     1413   EST02447   CAMP-regulated phosphoprotein   B35308   PIR   21   86.4     1413   EST02447   CAMP-specific phosphodiesterase   HUMPDEAA   GB   363   69.0     396   EST01443   CDPdiacylglycerol-serine O-phosphatidyltransferase   JH0368   PIR   33   41.2     1956   EST01663   Ca2+-transporting ATPase 2   B28065   PIR   125   88.9     1126   EST01664   Calbindin D28   RATCALBD28   GB   81   87.8     1039   EST01655   Calcium channel   S05054   PIR   33   67.6     1910   EST01665   Calmodulin   Calmodulin-dependent protein kinase, type   II, beta   A26464   PIR   93   98.9     13   EST01913   Caltrin coat assembly protein AP50 homolog   YSCYAP54   I GPU   62   63.5     2400   EST01676   Cofilin   PIGCOFIL   GB   132   89.5     2400   EST01824   Cysteine-rich intestinal protein   GYRTI   PIR   56   66.7     1588   EST02633   D2223 repetitive DNA   HUMREP   GB   160   76.4     2192   EST01257   Diacylglycerol kinase, lymphyocyte   S09156   PIR   44   42.2     1441   EST02477   Diamine acetyltransferase   ATDA\$HUMAN   SP   74   45.3     650   EST00642   Dilute (myosin heavy chain)   MUSDILUTE   GPU   27   100.0     2302   EST01779   Discs-large tumor suppressor   DRODLGA   1   GPU   57   63.0     188   EST02565   Fatty acid synthase   BOVMTASB   GB   293   85.4     1332   EST02362   GA binding protein, beta subunit   MUSGAC   1   GPU   86   90.8     1667   EST00825   Gamma-aminobutyric acid transporter   A35918   PIR   26   59.3     1412   EST02446   Glutamate-aspartate carrier protein   GLSRAT   SP   34   74.3	1492 ESTO2530 B cell-specific Mo Mt V intercation site	
13   EST00255   Cadherins   CADN\$HUMAN   SP   41   45.2     1348   EST02378   CAMP-dependent protein kinase inhibitor   MUSPKI   GB   234   91.5     1341   EST01041   CAMP-regulated phosphoprotein   B35308   PIR   21   86.4     1413   EST02447   CAMP-specific phosphodiesterase   HUMPDEAA   GB   363   69.0     396   EST01443   CDPdiecylglycerol-serine O-phosphatidytransferase   JH0368   PIR   33   41.2     1956   EST01663   Ca2+-transporting ATPase 2   B28065   PIR   125   88.9     1126   EST02146   Calbindin D28   RATCALBD28   GB   81   87.8     1039   EST02055   Calcium channel   S05054   PIR   33   67.6     1910   EST01645   Calmodulin   RATRCM1   GB   120   90.1     485   EST01466   Calmodulin-dependent protein kinase, type   II, beta   A26464   PIR   93   98.9     913   EST01913   Clathrin coat assembly protein   AP50   homolog   YSCYAP54   I GPU   62   63.5     2004   EST01676   Cofilin   PIGCOFIL   GB   132   89.5     2400   EST01824   Cysteine-rich intestinal protein   GYRTI   PIR   56   66.7     1588   EST02633   D2223   repetitive DNA   HUMREP   GB   160   76.4     2192   EST01257   Diacylglycerol kinase, lymphyocyte   S09156   PIR   44   42.2     1441   EST02477   Diamine acetyltransferase   ATDA\$HUMAN   SP   74   45.3     650   EST00642   Dilute   Imyosin heavy chain)   MUSDILUTE   GPU   27   100.0     2302   EST01779   Discs-large tumor suppressor   DRODLGA   GPU   53   63.0     188   EST00256   Enhancer of split   A30047   PIR   86   58.6     2289   EST001325   Fatty acid synthase   RATFAS   GB   98   79.8     310   EST00825   Gamma-aminobutyric acid transporter   A35918   PIR   26   59.3     2401   EST00246   Glutamiate-aspartate carrier protein   JV0092   PIR   57   37.9     1020   EST02034   Glutaminase   GLS*RAT   SP   34   74.3		
1348   EST02378   CAMP-dependent protein kinase inhibitor   1931   EST01041   CAMP-regulated phosphoprotein   B35308   PiR   21   86.4     1413   EST02447   CAMP-specific phosphodiesterase   HUMPDEAA   GB   363   69.0     396   EST01443   CDPdiacytglycerol-serine O-phosphatidytransferase   JH0368   PiR   33   41.2     1956   EST01663   Ca2+-transporting ATPase 2   B28065   PiR   125   88.9     1126   EST02146   Calbindin D28   RATCALBD28   GB   81   87.8     1039   EST02055   Calcium channel   S05054   PiR   33   67.6     1910   EST01665   Calmodulin dependent protein kinase, type II, beta A26464   PiR   93   98.9     913   EST01913   Clathrin coat assembly protein AP50 homolog   YSCYAP54   GPU   62   63.5     2004   EST01824   Cysteine-rich intestinal protein   PIGCOFIL   GB   132   89.5     2400   EST01824   Cysteine-rich intestinal protein   GYRTI   PIR   56   66.7     1588   EST02633   D2223 repetitive DNA   HUMREP   GB   160   76.4     2192   EST01257   Diacytglycerol kinase, lymphyocyte   S09156   PIR   44   42.2     1441   EST02477   Diamine acetyltransferase   ATDA\$HUMAN   SP   74   45.3     650   EST00642   Dilute (myosin heavy chain)   MUSDILUTE   GPU   27   100.0     2302   EST01735   Diacytglycerol kinase   RATFAS   GB   98   79.8     310   EST00377   Fo ATPase beta subunit, mitochondrial   S0VMTASB   GB   293   85.4     1332   EST02362   GA binding protein, beta subunit   MUSGAC   1   GPU   86   90.8     1667   EST00825   Gamma-aminobutyric acid transporter   A35918   PIR   26   59.3     2217   EST01738   Gelation factor ABP-280   A37098   PIR   74   80.0     1412   EST02346   Glutaminase   GLS*RAT   SP   34   74.3		
1931   EST01041   CAMP-regulated phosphoprotein   B35308   PIR   21   86.4     1413   EST02447   CAMP-specific phosphodiesterase   HUMPDEAA   GB   363   69.0     396   EST01443   CDPdiacytglycerol-serine O-phosphatidyttransferase   JH0368   PIR   33   41.2     1956   EST01663   Ca2+-transporting ATPase 2   B28065   PIR   125   88.9     1126   EST02146   Calbindin D28   RATCALBD28   GB   81   87.8     1039   EST02055   Calcium channel   S05054   PIR   33   67.6     1910   EST01645   Calmodulin   RATRCM1   GB   120   90.1     485   EST01466   Calmodulin-dependent protein kinase, type II, beta   A26464   PIR   93   98.9     913   EST01913   Clathrin coat assembly protein   AP50 homolog   YSCYAP54   GPU   62   63.5     2004   EST01824   Cysteine-rich intestinal protein   GYRTI   PIR   56   66.7     1588   EST02633   D2223 repetitive DNA   HUMREP   GB   160   76.4     2192   EST01257   Diacytglycerol kinase, lymphyocyte   S09156   PIR   44   42.2     1441   EST02477   Diamine acetyltransferase   ATDA\$HUMAN   SP   74   45.3     650   EST00642   Dilute (myosin heavy chain)   MUSDILUTE   GPU   27   100.0     2302   EST01779   Discs-large tumor suppressor   DRODLGA   GPU   53   63.0     188   EST00256   Enhancer of split   A30047   PIR   86   58.6     80   RATFAS   GB   98   79.8     310   EST00377   Fo ATPase beta subunit, mitochondrial   ST00256   Gamma-aminobutyric acid transporter   A35918   PIR   26   59.3     1412   EST02446   Glutamate-aspartate carrier protein   JV0092   PIR   57   37.9     1020   EST02034   Glutaminase   GLS*RAT   SP   34   74.3		
1413 EST02447		
1956   EST01443   CDPdiacytglycerol-serine O-phosphatidytransferase JH0368   PIR   33   41.2     1956   EST01663   Ca2+ transporting ATPase 2   B28065   PIR   125   88.9     1126   EST02146   Calbindin D28   RATCALBD28   GB   81   87.8     1039   EST02055   Calcium channel   S05054   PIR   33   67.6     1910   EST01645   Calmodulin   RATRCM1   GB   120   90.1     485   EST01466   Calmodulin-dependent protein kinase, type II, beta   A26464   PIR   93   98.9     913   EST01913   Clathrin coat assembly protein AP50 homolog   YSCYAP54   1   GPU   62   63.5     2004   EST01676   Cofilin   PIGCOFIL   GB   132   89.5     2400   EST01824   Cysteine-rich intestinal protein   GYRTI   PIR   56   66.7     1588   EST02633   D2223 repetitive DNA   HUMREP   GB   160   76.4     2192   EST01257   Diacytglycerol kinase, lymphyocyte   S09156   PIR   44   42.2     1441   EST02477   Diamine acetyttransferase   ATDA\$HUMAN   SP   74   45.3     650   EST00642   Dilute (myosin heavy chain)   MUSDILUTE   1   GPU   27   100.0     2302   EST01779   Discs-large tumor suppressor   DRODLGA   1   GPU   53   63.0     188   EST00256   Enhancer of split   A30047   PIR   86   58.6     2289   EST01325   Fatty acid synthase   RATFAS   GB   98   79.8     310   EST00377   Fo ATPase beta subunit, mitochondrial   BOVMTASB   GB   293   85.4     1332   EST02362   GA binding protein, beta subunit   MUSGAC   1   GPU   86   90.8     1667   EST00825   Gamma-aminobutyric acid transporter   A35918   PIR   26   59.3     1412   EST02446   Glutamate-aspartate carrier protein   JV0092   PIR   57   37.9     1020   EST02034   Glutaminase   GLS*RAT   SP   34   74.3		
1956   EST01663   Ca2+-transporting ATPase 2   B28065   PIR   125   88.9     1126   EST02146   Calbindin D28   RATCALBD28   GB   81   87.8     1039   EST02055   Calcium channel   S05054   PIR   33   67.6     1910   EST01645   Calmodulin   RATRCM1   GB   120   90.1     485   EST01466   Calmodulin   Calmodulin   Calmodulin   RATRCM1   GB   120   90.1     485   EST01913   Clathrin coat assembly protein AP50 homolog   YSCYAP54_1   GPU   62   63.5     2004   EST01676   Cofilin   PIGCOFIL   GB   132   89.5     2400   EST01824   Cysteine-rich intestinal protein   GYRTI   PIR   56   66.7     1588   EST02633   D2223 repetitive DNA   HUMREP   GB   160   76.4     2192   EST01257   Diacylglycerol kinase, lymphyocyte   S09156   PIR   44   42.2     1441   EST02477   Diamine acetyltransferase   ATDA\$HUMAN   SP   74   45.3     650   EST00642   Dilute Imyosin heavy chain)   MUSDILUTE   GPU   27   100.0     2302   EST01779   Discs-large tumor suppressor   DRODLGA_1   GPU   53   63.0     188   EST00256   Enhancer of split   A30047   PIR   86   58.6     2289   EST01325   Fatty acid synthase   RATFAS   GB   98   79.8     310   EST00377   Fo ATPase beta subunit   mitochondrial   BOVMTASB   GB   293   85.4     1332   EST02362   GA binding protein, beta subunit   MUSGAC_1   GPU   86   90.8     1667   EST00825   Gamma-aminobutyric acid transporter   A35918   PIR   26   59.3     1412   EST02446   Glutamite-aspartate carrier protein   JV0092   PIR   57   37.9     1020   EST02034   Glutaminase   GLS*RAT   SP   34   74.3		
1126 EST02146   Calbindin D28   Calbindin D2		
1039 EST02055   Calcium channel   S05054   PIR   33   67.6     1910 EST01645   Calmodulin   Ca		
1910 EST01645   Calmodulin		
485 EST01466 Calmodulin-dependent protein kinase, type II, beta A26464 PIR 93 98.9 913 EST01913 Clathrin coat assembly protein AP50 homolog YSCYAP54_1 GPU 62 63.5 2004 EST01676 Cofilin PIGCOFIL GB 132 89.5 2400 EST01824 Cysteine-rich intestinal protein GYRTI PIR 56 66.7 1588 EST02633 D2223 repetitive DNA HUMREP GB 160 76.4 2192 EST01257 Diacylglycerol kinase, lymphyocyte S09156 PIR 44 42.2 1441 EST02477 Diamine acetyltransferase ATDA\$HUMAN SP 74 45.3 650 EST00642 Dilute Imyosin heavy chain) MUSDILUTE 1 GPU 27 100.0 2302 EST01779 Discs-large tumor suppressor DRODLGA_1 GPU 53 63.0 188 EST00256 Enhancer of split A30047 PIR 86 58.6 2289 EST01325 Fatty acid synthase RATFAS GB 98 79.8 310 EST00377 Fo ATPase beta subunit, mitochondrial 1332 EST02362 GA binding protein, beta subunit MUSGAC_1 GPU 86 90.8 1667 EST00825 Gamma-aminobutyric acid transporter A35918 PIR 26 59.3 1412 EST02446 Glutamate-aspartate carrier protein JV0092 PIR 57 37.9 1020 EST02034 Glutaminase GLS\$RAT SP 34 74.3		
913 EST01913 Clathrin coat assembly protein AP50 homolog	485 EST01466 Calmodulin-dependent protein kinase, tv	
2004 EST01676 Cofilin   PIGCOFIL GB   132 89.5		
2400 EST01824   Cysteine-rich intestinal protein   1588 EST02633   D2223 repetitive DNA		
1588 EST02633 D2223 repetitive DNA	2400 EST01824 Cysteine-rich intestinal protein	
2192 EST01257   Diacylglycerol kinase, lymphyocyte   S09156   PIR   44   42.2     1441 EST02477   Diamine acetyltransferase   ATDA\$HUMAN   SP   74   45.3     650 EST00642   Dilute (myosin heavy chain)   MUSDILUTE   GPU   27   100.0     2302 EST01779   Discs-large tumor suppressor   DRODLGA   GPU   53   63.0     188 EST00256   Enhancer of split   A30047   PIR   86   58.6     2289 EST01325   Fatty acid synthase   BOVMTASB   GB   98   79.8     310 EST00377   Fo ATPase beta subunit, mitochondrial   BOVMTASB   GB   293   85.4     1332 EST02362   GA binding protein, beta subunit   MUSGAC   GPU   86   90.8     1667 EST00825   Gamma-aminobutyric acid transporter   A35918   PIR   26   59.3     2217 EST01738   Gelation factor ABP-280   A37098   PIR   74   80.0     1412 EST02446   Glutamate-aspartate carrier protein   JV0092   PIR   57   37.9     1020 EST02034   Glutaminase   GLS\$RAT   SP   34   74.3		HUMREP GB 160 76.4
1441 EST02477   Diamine acetyltransferase   ATDA\$HUMAN   SP   74   45.3		
MUSDILUTE_1   GPU   27   100.0		ATDA\$HUMAN SP 74 45.3
2302 EST01779 Discs-large tumor suppressor 188 EST00256 Enhancer of split 2289 EST01325 Fatty acid synthase 310 EST00377 Fo ATPase beta subunit, mitochondrial 1332 EST02362 GA binding protein, beta subunit 1667 EST00825 Gamma-aminobutyric acid transporter 2217 EST01738 Gelation factor ABP-280 1412 EST02446 Glutamate-aspartate carrier protein 1020 EST0034 Glutaminase  DR0DLGA 1 GPU 53 63.0 A30047 PIR 86 58.6 RATFAS GB 98 79.8 MUSGAC 1 GPU 86 90.8 A35918 PIR 26 59.3 A37098 PIR 74 80.0 JV0092 PIR 57 37.9		MUSDILUTE 1 GPU 27 100.0
188       EST00256       Enhancer of split       A30047       PIR       86       58.6         2289       EST01325       Fatty acid synthase       RATFAS       GB       98       79.8         310       EST00377       Fo APPase beta subunit, mitochondrial       BOVMTASB       GB       293       85.4         1332       EST02362       GA binding protein, beta subunit       MUSGAC_1       GPU       86       90.8         1667       EST00825       Gamma-aminobutyric acid transporter       A35918       PIR       26       59.3         2217       EST01738       Gelation factor ABP-280       A37098       PIR       74       80.0         1412       EST022446       Glutamate-aspartate carrier protein       JV0092       PIR       57       37.9         1020       EST02034       Glutaminase       GLS\$RAT       SP       34       74.3		
2289 EST01325 Fatty acid synthase   RATFAS   GB   98 79.8		
310 EST00377 Fo ATPase beta subunit, mitochondrial 1332 EST02362 GA binding protein, beta subunit 1667 EST00825 Gamma-aminobutyric acid transporter 2217 EST01738 Gelation factor ABP-280 1412 EST02446 Glutamate-aspartate carrier protein 1020 EST02034 Glutaminase  BOVMTASB GB 293 85.4  MUSGAC_1 GPU 86 90.8  A35918 PIR 26 59.3  JV0092 PIR 57 37.9  GLS\$RAT SP 34 74.3		RATFAS GB 98 79.8
1332 EST02362 GA binding protein, beta subunit MUSGAC_1 GPU 86 90.8 1667 EST00825 Gamma-aminobutyric acid transporter A35918 PIR 26 59.3 2217 EST01738 Gelation factor ABP-280 A37098 PIR 74 80.0 1412 EST02446 Glutamate-aspartate carrier protein JV0092 PIR 57 37.9 1020 EST02034 Glutaminase GLS\$RAT SP 34 74.3		BOVMTASB GB 293 85.4
1667     EST00825     Gamma-aminobutyric acid transporter     A35918     PIR 26 59.3       2217     EST01738     Gelation factor ABP-280     A37098     PIR 74 80.0       1412     EST02446     Glutamate-aspartate carrier protein     JV0092     PIR 57 37.9       1020     EST02034     Glutaminase     GLS\$RAT     SP 34 74.3		
2217 EST01738 Gelation factor ABP-280       A37098       PIR 74 80.0         1412 EST02446 Glutamate-aspartate carrier protein       JV0092       PIR 57 37.9         1020 EST02034 Glutaminase       GLS\$RAT       SP 34 74.3		· · · · · •
1412 EST02446 Glutamate-aspartate carrier protein JV0092 PIR 57 37.9 1020 EST02034 Glutaminase GLS\$RAT SP 34 74.3	•	
1020 EST02034 Glutaminase . GLS\$RAT SP 34 74.3	1412 EST02446 Glutamate-aspartate carrier protein	
1999 ESTOTOGO TRISLUCUMPALIUMLY AMILICEN MOUNTELL MS///S PIK BS /5.0	1885 EST01639 Histocompatibility antigen modifier 1	A37779 PIR 63 75.0
1495 EST02533 Hypothetical 43.5K protein JU0319 PIR 43 52.3		
2326 EST01791 Inositol-1,4,5-trisphosphate 3-kinase JN0129 PIR 65 68.2		
SEQ ID EST# Putative Identification Accession DB Len %ID		

724 EST01529 Interferon-induced 54K protein	INI4\$HUMAN SP 76 70.1
1035 EST02051 J1 protein	MUSJ1PRO GB 362 85.7
1229 EST02258 KUP protein	HUMKUPMR 1 GPU 54 36.4
993 EST02007 Kinase 5 protein	CHKCEK5 1 GPU 68 94.2
77 EST00257 Kinesin	A35075 PIR 57 86.2
78 EST00258 Kinesin	A35075 PIR 62 47.6
2245 EST01748 Kinesin	A35075 PIR 98 52.5
2282 EST01764 Lamin B receptor	A36427 PIR 76 71.4
2173 EST01724 Lon protease	J00901 PIR 103 41.3
1427 EST02463 Long-chain-fatty-acid-CoA ligase	A36275 PIR 36 62.2
313 EST00276 Lysosomal membrane glycoprotein 1 (L/	
161 EST00247 MARCKS (myristoylated alanine-rich pro	
· · · · · · · · · · · · · · · · · · ·	
1386 EST02418 MARCKS homolog	
769 EST00734 MARCKS homolog	S08341 PIR 61 40.3
43 EST00371 Maternal G10 protein	S05955 PIR 38 92.3
1468 EST02505 Matrin 3	RATMATRIN3 GB 137 93.5 ependent) A24400 PIR 63 39.1
639 EST00632 Membrane transport superfamily (GTP-d	
1894 EST01643 Membrane transport superfamily (GTP-c	· ·
824 EST01865 Microtubule-associated protein 18	RATNEU GB 293 86.4
223 EST00368 Microtubule associated protein 18	A33645 PIR 30 54.8
2032 EST01683 Microtubule-associated protein 1B	A33645 PIR 49 62.0
2017 EST01678 Milk fat globule membrane protein	A36479 PIR 48 61.2
1704 EST01580 Myeloid differentiation primary response	
2226 EST01744 NAD(P) + transhydrogenase (B-specific)	
1567 EST02610 Neural cell adhesion molecule L1	S05479 PIR 82 43.4
506 EST01471 Neuraxin	S06017 PIR 120 84.3
1566 EST02609 Neutrophil oxidase factor	A34855 PIR 43 47.7
952 EST01961 Notch/Xotch	HUMTAN1_1 GPU 85 57.0
227 EST00259 Notch/Xotch	A35844 PIR 74 85.3
1395 EST02429 Nuclear factor 1-like protein (NF1)	HAMNF1A GB 111 92.0
1681 EST01573 Nucleoside diphosphate kinase	A33386 PIR 71 52.8
346 EST01828 Otd homeotic protein	A35912 PIR 35 52.8
2254 EST01751 Phosphatidylinositol-4,5-bisphosphate p	
1869 EST00992 Polymyxin B resistance	A32714 PIR 20 76.2
93 EST00287 Processing enhancing protein	S03968 PIR 96 58.8
2353 EST01806 Prohibitin	RATPROHIB_1 GPU 120 97.5
2297 EST01775 Prohormone cleavage enzyme	MUSMPC1A_1 GPU 91 93.5
9 EST00376 Prolyl endopeptidase	PIGPREP GB 223 83.9
1069 EST02087 Protein kinase C, zeta	HUMPKCL GB 382 58.7
1933 EST01650 Protein phosphatase 2A beta subunit	HUMPROP2AB GB 288 76.8
202 EST00298 Protein-tyrosine phosphatase LRP	LRP\$MOUSE SP 62 44.4
1654 EST01572 Protochlorophyllide reductase	S04783 PIR 34 57.1
38 EST00374 RNA polymerase II 6th subunit (RPO26)	A36352 PIR 72 75.3
1478 EST02515 Rab5	F34323 PIR 91 82.6
2368 EST01389 Radial spoke protein 3	S05962 PIR 58 52.5
37 EST00038 ras p21-like small GTP-binding protein (st	
180 EST00299 ras-related proteins	S10493 PIR 51 46.1
1700 EST01579 Retrovirus-related gag polyprotein	FOHUE2 PIR 95 77.1
1511 EST02550 Retrovirus-related pol polyprotein	GNLJGL PIR 50 54.9
102 EST00248 rho H12/ ARH12	BOVBGBRH GB 195 79.6
1715 EST01583 Ribosomal protein L18a	R5RT18 PIR 68 95.7
SEQ ID EST# Putative Identification	Accession DB Len %ID

1856 ESTO1627 Ribosomal protein L1a	A24579 PIR	75 63.1
1974 EST01667 Ribosomal protein L3	J00771 PIR	74 80.0
301 EST00300 Ribosomal protein L30	R6RT30 PIR	57 96.5
22 EST00301 Ribosomal protein S10	R3RT10 PIR	66 97.0
2402 EST01826 Ribosomal protein S10	R3YM10 PIR	36 51.4
463 EST01459 Ribosomal protein YL10	S11581 PIR	40 68.3
1408 EST02442 Seven in absentia	A36195 PIR 4	6 80.8
299 EST00249 smg p25A GDP dissociation inhibitor	A35652 PI	R 97 77.5
951 EST01960 Spectrin, beta	HUMSPTB GB 20	68 67.7
2089 EST01699 Sperm membrane protein	A35981 PIR	52 58.5
2073 EST01697 Succinate dehydrogenase flavoprotein	BOVSDHFP1 1	
2138 EST01715 Succinate dehydrogenase flavoprotein	BOVSDHFP1 1	
430 EST00472 Synaptotagmin (p65)	SY65\$HUMAN SF	
1371 EST02402 Talin	MUSTALINE 1 GPU	79 81.2
1771 EST01601 Thiosulfate sulfurtransferase trhodanese		65 81.8
300 EST00232 Transforming protein (dbl)	TVHUDB PIR	25 65.4
189 EST00282 trkB		
103 13100202 1185	A35104 PIR 33	67.6
653 EST01512 Tubulin, alpha		67.6 223 75.0
	HUMTUBAG GB	
653 EST01512 Tubulin, alpha	HUMTUBAG GB 25 HUMTBB5 GB 25	223 75.0
653 EST01512 Tubulin, alpha 594 EST01490 Tubulin, beta	HUMTUBAG GB 2 HUMTBB5 GB 29 HUMTUBBM GB 2	223 75.0 98 93.6
653 EST01512 Tubulin, alpha 594 EST01490 Tubulin. beta 757 EST01542 Tubulin, beta	HUMTUBAG GB 2 HUMTBB5 GB 29 HUMTUBBM GB 2 A26561 PIR 109	223 75.0 98 93.6 217 90.4
653 EST01512 Tubulin, alpha 594 EST01490 Tubulin. beta 757 EST01542 Tubulin, beta 1245 EST02274 Tubulin, beta	HUMTUBAG GB : HUMTBB5 GB 29 HUMTUBBM GB 2 A26561 PIR 109 HUMECK GB 3	223 75.0 98 93.6 217 90.4 5 88.7
653 EST01512 Tubulin, alpha 594 EST01490 Tubulin. beta 757 EST01542 Tubulin, beta 1245 EST02274 Tubulin, beta 1147 EST02169 Tyrosine kinase 1701 EST00853 Unc-104 2121 EST01711 Valine-tRNA ligase	HUMTUBAG GB : HUMTBB5 GB 29 HUMTUBBM GB 20 A26561 PIR 10 HUMECK GB 3 JN0114 NR 36	75.0 98 93.6 217 90.4 5 88.7 184 74.3
653 EST01512 Tubulin, alpha 594 EST01490 Tubulin. beta 757 EST01542 Tubulin, beta 1245 EST02274 Tubulin, beta 1147 EST02169 Tyrosine kinase 1701 EST00853 Unc-104	HUMTUBAG GB : HUMTBB5 GB 29 HUMTUBBM GB 20 A26561 PIR 10 HUMECK GB 3 JN0114 NR 36	223 75.0 98 93.6 217 90.4 5 88.7 184 74.3 6 45.0
653 EST01512 Tubulin, alpha 594 EST01490 Tubulin, beta 757 EST01542 Tubulin, beta 1245 EST02274 Tubulin, beta 1147 EST02169 Tyrosine kinase 1701 EST00853 Unc-104 2121 EST01711 Valine-tRNA ligase 187 EST00152 Wilm's tumor-related protein 1726 EST01588 XPR2 alkaline extracellular protease	HUMTUBAG GB : HUMTBB5 GB 29 HUMTUBBM GB : A26561 PIR 109 HUMECK GB 3 JN0114 NR 36 A29871 PIR 5	223 75.0 28 93.6 217 90.4 5 88.7 184 74.3 6 45.0 66 57.9 228 99.6
653 EST01512 Tubulin, alpha 594 EST01490 Tubulin, beta 757 EST01542 Tubulin, beta 1245 EST02274 Tubulin, beta 1147 EST02169 Tyrosine kinase 1701 EST00853 Unc-104 2121 EST01711 Valine-tRNA ligase 187 EST00152 Wilm's tumor-related protein 1726 EST01588 XPR2 alkaline extracellular protease 249 EST00275 Zinc Finger Proteins	HUMTUBAG GB 2 HUMTUBBM GB 2 HUMTUBBM GB 2 A26561 PIR 10 HUMECK GB 3 JN0114 NR 36 A29871 PIR 5 HUMQM GB	223 75.0 28 93.6 217 90.4 5 88.7 184 74.3 6 45.0 6 57.9 228 99.6 88 46.1
653 EST01512 Tubulin, alpha 594 EST01490 Tubulin, beta 757 EST01542 Tubulin, beta 1245 EST02274 Tubulin, beta 1147 EST02169 Tyrosine kinase 1701 EST00853 Unc-104 2121 EST01711 Valine-tRNA ligase 187 EST00152 Wilm's tumor-related protein 1726 EST01588 XPR2 alkaline extracellular protease 249 EST00275 Zinc Finger Proteins 413 EST01446 Zinc Finger Proteins	HUMTUBAG GB : HUMTUBBS GB 29 HUMTUBBM GB 20 A26561 PIR 10 HUMECK GB 3 JN0114 NR 36 A29871 PIR 5 HUMQM GB B26955 PIR	75.0 98 93.6 117 90.4 5 88.7 184 74.3 6 45.0 16 57.9 228 99.6 88 46.1 5 57.7
653 EST01512 Tubulin, alpha 594 EST01490 Tubulin, beta 757 EST01542 Tubulin, beta 1245 EST02274 Tubulin, beta 1147 EST02169 Tyrosine kinase 1701 EST00853 Unc-104 2121 EST01711 Valine-tRNA ligase 187 EST00152 Wilm's tumor-related protein 1726 EST01588 XPR2 alkaline extracellular protease 249 EST00275 Zinc Finger Proteins 413 EST01446 Zinc Finger Proteins 469 EST01460 Zinc Finger Proteins	HUMTUBAG GB : HUMTUBBM GB : A26551 PIR 10: A29871 PIR 5 HUMQM GB B26955 PIR S06551 PIR 12: S00754 PIR 45	75.0 98 93.6 117 90.4 5 88.7 184 74.3 6 45.0 16 57.9 228 99.6 88 46.1 5 57.7
653 EST01512 Tubulin, alpha 594 EST01490 Tubulin, beta 757 EST01542 Tubulin, beta 1245 EST02274 Tubulin, beta 1147 EST02169 Tyrosine kinase 1701 EST00853 Unc-104 2121 EST01711 Valine-tRNA ligase 187 EST00152 Wilm's tumor-related protein 1726 EST01588 XPR2 alkaline extracellular protease 249 EST00275 Zinc Finger Proteins 413 EST01446 Zinc Finger Proteins 469 EST01460 Zinc Finger Proteins 833 EST01560 Zinc Finger Proteins	HUMTUBAG GB : HUMTUBBM GB : A26561 PIR 10' HUMECK GB 3 JN0114 NR 36' A29871 PIR 5 HUMOM GB B26955 PIR S06551 PIR 25' S00754 PIR 45' C32891 PIR 3	223 75.0 98 93.6 217 90.4 5 88.7 184 74.3 6 45.0 16 57.9 228 99.6 88 46.1 5 57.7 5 60.9
653 EST01512 Tubulin, alpha 594 EST01490 Tubulin, beta 757 EST01542 Tubulin, beta 1245 EST02274 Tubulin, beta 1147 EST02169 Tyrosine kinase 1701 EST00853 Unc-104 2121 EST01711 Valine-tRNA ligase 187 EST00152 Wilm's tumor-related protein 1726 EST01588 XPR2 alkaline extracellular protease 249 EST00275 Zinc Finger Proteins 413 EST01460 Zinc Finger Proteins 469 EST01460 Zinc Finger Proteins 1230 EST02259 Zinc finger proteins	HUMTUBAG GB : HUMTUBBM GB : A26561 PIR 10' HUMECK GB 3 JN0114 NR 36' A29871 PIR 5 HUMQM GB B26955 PIR S06551 PIR 25' S00754 PIR 45' C32891 PIR 3	223 75.0 28 93.6 217 90.4 5 88.7 84 74.3 6 45.0 66 57.9 228 99.6 88 46.1 5 57.7 5 60.9 4 54.3
653 EST01512 Tubulin, alpha 594 EST01490 Tubulin, beta 757 EST01542 Tubulin, beta 1245 EST02274 Tubulin, beta 1147 EST02169 Tyrosine kinase 1701 EST00853 Unc-104 2121 EST01711 Valine-tRNA ligase 187 EST00152 Wilm's tumor-related protein 1726 EST01588 XPR2 alkaline extracellular protease 249 EST00275 Zinc Finger Proteins 413 EST01446 Zinc Finger Proteins 469 EST01460 Zinc Finger Proteins 833 EST01560 Zinc Finger Proteins	HUMTUBAG GB 2 HUMTUBBM GB 2 HUMTUBBM GB 3 A26561 PIR 10 HUMECK GB 3 JN0114 NR 36 A29871 PIR 5 HUMQM GB B26955 PIR S06551 PIR 25 S00754 PIR 45 C32891 PIR 3 S00754 PIR 10 S00754 PIR 7	223 75.0 28 93.6 217 90.4 5 88.7 184 74.3 6 45.0 66 57.9 228 99.6 88 46.1 5 7.7 5 60.9 4 54.3 5 67.0

There is little redundancy in EST sequencing according to the present invention. Of the nuclear-encoded messenger RNAs, the most common ESTs were to the  $\beta$ -actin (0.6% of the EST clones) and myelin basic protein genes (MBP, 0.5% of the clones). MBP, a highly expressed structural component of nerve tissue (Kamholtz, J., de Ferra, F., Puckett, C., & Lazzarini, R. Proc. Natl. Acad. Sci., USA 83: 4962-4966 (1986)), displays four alternate splicing forms, of which at least two are present among the ESTs reported here. Other common ESTs were Gs-alpha gamma-actin and both a- and alpha-tubulin.

By matching ESTs to known database sequences, a phenotypic characterization of the tissue begins to emerge. Protein superfamilies matched by ESTs were grouped into three broad functional categories to assess the biological spectrum represented by these randomly selected cDNA clones. Structural and metabolic classes comprised about 30% of the ESTs with database matches. Twenty-five percent were involved in regulatory pathways and the remainder were not classifiable. Eleven of the eighteen enzymes of glycolysis and the citric acid cycle are represented by at least one subunit or isozyme. In addition, several genes not previously known to be expressed in the brain were matched, including spermine/spermidine acetyltransferase (Casero, R., Celano, P, Ervin, S., Applegren, N., Wiest, L. & Pegg, A. J. Biol. Chem. 266: 810-814 (1991)) and osteopontin (Young, M., Kerr, J., Termine, J., Wewer, U., Wang, M., McBride, W. & Fisher, L. Genomics 7:491-502 (1990)).

30

5

10

15

20

25

## EXAMPLE 5

## Mapping of ESTs to Human Chromosomes

Randomly selected ESTs corresponding to SEQ ID NOs. were assigned to chromosomes via PCR (see Table 3).
Oligonucleotide primer pairs were designed from EST

10

15

20

25

. 30

35

sequences to minimize the chance of amplifying through an intron. The oligonucleotides were 18-23 bp in length and designed for PCR amplification using the computer program INTRON (National Institutes of Mental Health, Bethesda, MD). The program is based on the assumptions that: 1) introns are genomic sequences that interrupt the coding and noncoding sequences of genes (Smith, J. Mol. Evol. 27:45-55 (1988)); 2) there are consensus sequences for splice junctions (Shapiro, et al., Nucl. Acids Res. 15:7155-7174 (1987)); and 3) that 90% of the human genes studied have 3' untranslated regions of mRNA not interrupted by introns in the genomic DNA (Hawkins, Nucl. Acids Res. 16:9893-9908 (1988)).

The program evaluates the likelihood that a given GG or CC dinucleotide represents a former exon-intron boundary. Specifically, every input strand is processed by the INTRON program twice, first evaluating the sense mRNA strand, and then processing the complementary or anti-sense strand. The program evaluates each sequence by finding all GG or CC pairs (possible former splice sites), searching for STOP codons in all three reading frames, and analyzing the GG or CC pairs surrounded by stop codons. All regions of the EST that are unlikely to contain splice junctions based on CC content, GG content, and stop codon frequency are then marked by the program in uppercase.

The creation of PCR primers from known sequences is well known to those with skill in the art. For a review of PCR technology see Erlich, H.A., PCR Technology; Principles and Applications for DNA Amplification. 1992. W.H. Freeman and Co., New York. ESTs were examined for the presence of stop codons in each reading frame and for consensus splice junctions. The presence of stop codons and absence of splice junction sequences are more characteristic of 3' untranslated sequences than of introns. The untranslated sequences are unique to a given gene; thus, primers from

-47-

these regions are less likely to prime other members of a gene family or pseudogenes.

5

10

15

20

25

30

35

The primers were used in polymerase chain reactions (PCR) to amplify templates from total human genomic DNA. PCR conditions were as follows: 60 ng of genomic DNA was used as a template for PCR with 80 ng of each oligonucleotide primer, 0.6 unit of Tag polymerase, and 1 uCu of a 32P-labeled deoxycytidine triphosphate. was performed in a microplate thermocycler (Techne) under the following conditions: 30 cycles of 94°C, 1.4 min; 55°C, 2 min; and 72°C, 2 min; with a final extension at 72°C for 10 min. The amplified products were analyzed on a 6% polyacrylamide sequencing gel and visualized by autoradiography. If the size of the resulting product was equivalent to the EST from which the primers are derived, then the PCR reaction was repeated with DNA templates from two panels of human-rodent somatic cell hybrids; BIOS PCRable DNA (BIOS Corporation) and NIGMS Human-Rodent Somatic Cell Hybrid Mapping Panel Number 1 (NIGMS, Camden, NJ).

PCR was used to screen a series of somatic cell hybrid cell lines containing defined sets of human chromosomes for the presence of a given EST. DNA was isolated from the somatic hybrids and used as starting templates for PCR reactions using the primer pairs from EST sequences selected above. Only those somatic cell hybrids with chromosomes containing the human gene corresponding to the EST will yield an amplified fragment. ESTs were assigned to a chromosome by analysis of the segregation pattern of PCR products from hybrid DNA templates. For a review of techniques and analysis of results from somatic cell gene mapping experiments. (See Ledbetter et al., Genomics 6:475-481 (1990).) The single human chromosome present in all cell hybrids that give rise to an amplified fragment represents the chromosome containing that EST.

The assignment of 100 ESTs and corresponding genes to chromosomes by PCR is shown in Table 3.

Table 3: Assignment of ESTs to Chromosomes by PCR

SEO ID	EST#	<u>Ch</u>	r PRIMER #1	PRIMER #2
5	EST00012	1	TCCAGGCAATCCCAGAATAG	CTAATTGAGCTCACTGGCCC
57	EST00058	1	CTGTTTGCAAGTTTCAAAGC	GCCATTTCTAACAACCAGAG
64	EST00066	1	GCCATTGTGCTGAATAGAGT	GTTAGTGTTTCCTTAGCAAG
83	EST00079	1	CAGCTAATTGACCTGGGCTA	CAACATGCTCTGAGCTTTAG
83	EST00079	1	GGCAGAGCATAATGAGTATA	CATATGCATATGGTCCCTAT
91	EST00086	1	AGTTTAGATGGAGGGCTGTC	TCTGCCCTAATGCGCAGGCT
105	EST00365	1	CTTAATCACCTCCCTTTTGT	CCTTAGTTGGAGATAAGGTC
109	EST00095	1	AGTCTAATCCTGTACACTTG	CGGGCTTTCTCTGAATTGGT
116	EST00100	1	TTAGAAGTGCCCATGGGAGG	TTTTAAGGCTCTGGAGTGTT
141	EST00118	ī	CTCAGAGAAACTTAGGTGAA	CTACAGAATCATTTCACCAG
220	EST00372	ī	AAGTTGCACATTGCCCAAGG	ATAGTACTGCAAGGTTATTC
237	EST00187	ī	TTACAAATTTCTCTTGACGC	CTGAAGGAGCACAGTTTCTC
242	EST00192	ī	GGATCAGATAATCAAACAGG	GCTTAGGATATGAATGCATA
259	EST00202	ī	GCATCACAGTTTAACTGAGG	CTACATATTTGTGCCTCCTT
269	EST00293	ī	CTGTTGCTGTGCAGTAGCTT	
299	EST00249	1	GATCATGCAGACGTAGATAT	CTTTTGACCCAGTGAAACTT
1651	EST00810	1	TAGTCGCTGTAAGTTGATTC	CCAACTCCTGCCAGATCATT
16	EST00010	2	CAGGCAAGTTTCTTCCAGGA	GCTTTGCTGGATGCTTCATT
1898	EST01013	2	GGCTGAGAACGGTTAGCATA	TCAGACCCATGGTCAGCTT CCCTCAGCTTAGGGGAATG
8	EST00234	2	TAGAAGGCAAACTATGTCCC	
36	EST00234	2	AGCCAGAAGGCTGCTTAAAG	GGTTGAGGATTGGCTTTTAC
123	EST00106	2	GTCTAATTTGTAACCTTCAG	GCAGTGAACCAGTACTCCTA
192	EST00106	2	GATTTATGTCTGGGAACTAA	GATAGATTGTATAAGAAGCC
200	EST00155	2		GCAGCATGTGAAAGAATGAT
284	EST00162 EST00216	2	TTTAATGGGTGGTGGGAGCT	CGATGCACATCCTTCTCCAT
102	EST00216	3	CCTAAGAATTCGTTTGGCTC	GTCTGGCACATAATAGATTTG
167	EST00248	3	ATACTACATCTAGTCTGG	TTACAGTTCTGTGGTTTC
12	EST00138	3	AAACAGCTGCGGAGTACA CCTAGCAAACTCATACACAC	AAAGGATCCTCCACTCCAGA
60	EST002/4 EST00062	3	ACACATTAACGGTGCTGCAG	CATAAGTGAATGGACACAGG
77	EST00062	3		GGAATCAGCCCTTGAGGACT
107	EST00257	3	AAGCTCACAACGCAGATCTG	CTGGAACAGCTTACAAAGGT
107	EST00093		ATTGAACTCTGTCAACAGTG	TGTAAAACAAAGGCCAAACT
1706	EST00094 EST00857	3 3	AL2-GCAGGATGTCAGTCTTTTGAG	AGCACACTTATCTACCACGGC
37			AL2-GCAGGATGTCAGTCTTTTGAG	CCAGCACACATTATCTACCACG
. 6	EST00038	4	AACTTCGCAGTCATGAGAAC	TGTATCGGGCAGTTCTCAG
. 8 37	EST00013	4	CACATGTTCTCCCTCTTTCA	GCATTTTGGAGCTCTTCCGT
	EST00038	4	AL2-GGAAGTACAGGATTTGGC	TTAGAGATGGGATGATGCCG
31	EST00033	5	TGGGTACCCTAAGGTGTTTG	GACTAATCTAAGGTCTAGG
28 59	EST00030	5	AGATAAGTTAGGAAGCTGGT	ACTCACTGCTAGTATCATCC
74	EST00061	5	AAAGTTTCTTAGCACCCCCC	CAGACTTTGACAAAAGAATC
	EST00073	5	ATCAGACACGTGGCAGGGTT	AAGTCCCTGAGGGTGCAGAA
121	EST00104	5	TGAAGGCAGCTGCTAAATCT	GGATGTATTGATCTGACTCA
149	EST00123	5	ATACTGTCAACGGAGGGTGA	GTCTGCAGGTTTCTCCTTGA
235	EST00185	5	TTACTGTCCCATCAGATATC	TACACTCTTAAGAAGGTATG
1643	EST00803	5	GAGCGTTTAAAAGAGATTCT	TACAGACAGCCATGTTCCAA
1677	EST00835	5	AL2-TCTCCAACACAGTCATGC	CGGATGCCATCATATACC
23	EST00026	5	CCTGCAGTGACACTTAACAT	CTGCTCACCTGAAATTGATAC
121	EST00104	5	AL2-CAGATCAATACATCCTCTGGG	CTGTGCAGTGGTGAGTAAAAGG

SEO ID	EST#	<u>Chr</u>	PRIMER #1	PRIMER #2
ı	EST00007	6	TAGTTGATGGTCTGGGTTAT	GAAATCCCAGGGAGACAATG
19	EST00023	6	CAACTTACATTAGGGGTTTG	GACCTCATTAGAAGAGCCCA
155	EST00129	6	GGAAGCTGCCATATAAGCTC	TCAGTGTCGTACAATCTACC
224	EST00356	6	GCTGTATGTTAACCCTTTGT	TGGAACCCTCAAACACTGCT
288	EST00219	6	ACTTTCATGTTGAGAAGTAT	ATCTAGCTGAAACATTGCTG
1638	EST00798	6	CTTCATCTGTTAACTGTTGA	TGAAAATGAGTCACAGGCAG
1675	EST00833	6	AL2-ACCCAGTTCTCAAAGACC	GGTTTACCATTCAGAGGC
22	EST00301	6	CTCCGTGATTACCTTCATCT	TTGTAGGTATCTCTGTCAGCT
207	EST00167	7	GGTGCTACTTTGTGAATGCT	AGCAATGTGATTTTGTAGG
137	EST00272	7	AGTGGTCACTATCTACATGG	GATTCAGAATTACTAAGCCG
1659	EST00817	7	TGTATAGGCTCTACATAAAG	CTTAATCATGGATTCTTCGT
1680	EST00838	7	AL2-GTTCTTTCCCAGGTATGC	TTGTTGGTACTGAGGAAGTGCG
292	EST00223	8	TGCAGCAGTGACCATGAGAA	ATCATCTTTCCACGCGGCTT
134	EST00375	9	TCTGGGCTTCTGTGGTTCAA	CTGGCTGCTCAGCAACTCAT
1906	EST01021	9	GGATGTTTTCTATGTGACGA	TTCCAGTGCCCCTTTTGTCC
1645	EST00804	10	CTCCTTTGGGACAAACAACT	CCAACCCAAACATATTCTA
20	EST00024	10	AGCTGTTCCTGAGAGATGCA	CCTTGTGAAGAAAGACTTTC
157	EST00131	10	TCAGCAACAGGTCACTTTGG	CTAAGCATCTGCATGTCCAG
172	EST00142	10	TACTAGCATTTCTTACTCTC	TATGCTGATTGTTTGCACTC
250	EST00197	10	GGTGATTAGAGAGTCTGTTG	GAACTCTGTAGTGTTCTAAA
133	EST00111	11	GGAAATTAGGCTTAGCTCAC	GTGCAGAATACTTAGAGTCC
178	EST00294	11	GTTTGAAGGAAGTGATTTCC	TAGGGCCACCTCCAGTTCAT
10	EST00016	11	GTCTTTGGATTCTACGTAGA	CGATAATGACATTTCTTCTGG
126	EST00109	11	AL2-CTAACCACAACCCACACATTG	CCTCAGCACAAGAGAAGAATGG
7	EST00014	12	AACTTGCAACATAAATACTAG	GAGCAATGATTTCTAACAGT
254	EST00200	13	TTGTGTACTGTCTGATAGAC	TAAGCCATGGGCATCTATAA
2409	EST00273	13	GCAAGATGATGGAACATCCC	TTCCTTCTGGAGGCTCTACA
170	EST00295	14	GGTGCTTAAGGCCACTTTTG	CTTAGAGGATCATAGGTCTG
255	EST00201	14	CCAGGAGAGTAAGAAGATCA	GCAGAGTTGAATATGAACCT
290	EST00221	14	GTGCCAAGATGGCTCATGTA	GTATAGCTTTAAGCCAGTTC
293	EST00224	14	AATGCATTATGCCTGGTCTT	GGAAAAGTCTAGAACTTAGT
1664	EST00822	14	GGGTCAGAATTAAGAGGTCT	GTTCATCTCTAACTCCTTTC
315	EST00008	14	AAGCTGGCTGGGAAATGTTC	GTCATGCTAGTAAACTTACAC
1689	EST00845	14	AL2-AGGAGGAAGCTGAAATCC	GGAAGTCCATAAGAGACTCACC
95	EST00088	15	GTGACAGACCATGTCTATTG	AAGTGAGCGATTGCACCTTC
205 33	EST00165	15	AGGATGACCTGAGTGAGCTG	CCATGGCAGCAAGGAACTCT
247	EST00034 EST00279	16	TGTGTGAAAGGGAGTCTTGT	CCATTTTGACTGTTCCATAG
18	EST00279	16 16	TGGCTAGGGCAGGCCTTAAA CCATCTGTGTCCCAATTAAGC	GAGAAGAATATCAAATGGGG AGGGAAGAAGTCTAGAGCGA
68	EST003/3		* - *	
1652	EST00068 EST00811	17 17	CAAAGACGGGAGACGAATGA GAGCTGCATGTTGATAAGTA	AGTGGAACGCGTGGCCTATG TTGACTTAAGCTGACCTTAA
1702	EST00811	17	AL2-TTGCTGTGGAATCCATGAGAG	GGCAAGTGATCTGTTCTTGG
84	EST00834	19	AGAGATGTCAGTCCATTATC	CTATTCCACCTTACTCAAGG
223	EST00368	19	CATCATGTCGGAGACGCATT	TGGATGACCTGAGTCTGCAG
21	EST00368	20	AGTTCTGGAGGCTAGGAGTT	ATGTAAGGACCCCTAGATGG
210	EST00023	20	TGTCAACTTCCCTTTGGCCT	GAAGCTTGCTCATTCAGGAA
136	EST00108	20	AL2-TCGGAGAAGTTGCAGTTTCTG	GTTAAAAGCTGTTAGACGGGGC
120	EST00103	22	CACTGACTGACTCCTCTTTA	GGAACCGTAACTCTCCATAG
313	EST00103	X	ATTGACCTCAATGTAATAA	TTGGATTGGGCAAAATAG

SEO ID	EST#	Chr	PRIMER #1	PRIMER #2
162	EST00133	x	ATGTGAGCATCTATACCTGC	AATGAAGGCATGAGAATAGG
1669	EST00827	x	CGGACAACTAGGATAAATGC	TACGCGTTTGAATGGCTTGA
1917	EST01029	x	GAATAGCATTATTAGCCAGT	GGACCTATTGGAGATCTACT
1708	EST00858	x	AL2-AAGGCGAGGATTATGTGC	TTCTACTGGGTACACTTCGACC

Abbreviation: AL2: Amino-Link-2 Fluorescent Tag, Chr.: Chromosome.

The foregoing techniques have been used to further localize 9 ESTs and their associated genes to precise locations onto chromosome 6 or chromosome X, as reflected in Table 4A (in Example 7 below), using sublocalization techniques that employ somatic cell hybrids. used as hybridization probes and mapped to other chromosomes using techniques disclosed in Example 7. Somatic cell hybrids were prepared that contained defined subsets of chromosomes 6 and X. Methods for preparing and selecting somatic cell hybrids are known in the art. For a review of an exemplary procedure to generate somatic cell hybrids containing the short arm of human chromosome 6, see Zoghbi, et al., Genomics 9(4):713-720 (1991). For a general review of somatic cell hybridization see Ledbetter et al. (supra). The hybrids were processed to obtain DNA and analyzed by PCR and by fluorescence in situ hybridization. SEQ ID NOs 19, 22, 1, 224, 288 mapped to chromosome 6, while SEQ ID NOs 162, 1917, 1699 and 1899 mapped to chromosome X using somatic cell hybrids.

20

5

10

15

## EXAMPLE 6

# Mapping of All ESTs to Human Chromosomes

The procedure of Example 5 is repeated for all of the ESTs from Examples 1 and 2 not previously mapped to human chromosomes. Data are generated corresponding to the data in Table 3 for all of the unmapped ESTs. As previously mentioned, virtually all of the ESTs will map to a unique chromosomal location. The inability of any ESTs to localize to a unique location will be readily ascertainable during the mapping process.

30

25

Physical mapping of the type reported in Table 4 on all the EST clones reported here would provide human chromosome markers spaced on average every 1.2 megabases and would roughly double the number of expressed sequences that have been localized to chromosomes (McKusick, V. FASEB)

-53-

J. 5: 12-20 (1991)). Mapped ESTs are also a new resource to identify candidates for the estimated 5000 single-locus disease-associated genes (Id.).

#### EXAMPLE 7

# Alternative Technique for Mapping to Chromosomes Mapping of ESTs to chromosomes using fluorescence in situ hybridization

5

10

15

20

25

30

This technique was used to map an EST to a particular location on a given chromosome. Cell cultures, tissue, or whole blood were used to obtain chromosomes.

0.5 ml. of whole blood was added to RPMI 1640 and incubated 96 hours in a 5%CO<sub>2</sub>/37°C incubator. 0.05 ug/ml colcemide was added to the culture one hour before harvest. Cells were collected and washed in PBS. The suspension was incubated with a hypotonic solution of KCl added dropwise to reach a final volume of 5 ml. The cells were spun down and fixed by resuspending the cells in methanol and glacial acetic acid (3:1). The cell suspension was dropped onto glass slides and dried.

The slides were treated with RNase A and washed then dehydrated in a series of increasing concentrations of ethanol.

The EST to be localized was nick-translated using fluorescently labeled nucleotide (Korenberg, Jr., et al., Cell 53(3):391-400 (1988)). Following nick translation, unincorporated label was removed by spin dialysis through Sepharose. The probe was further extracted with phenol-chloroform to remove additional protein. The chromosomes were denatured in formamide using techniques known in the art and the denatured probe was added to the slides. Following hybridization, the cells were washed. The slides were studied under a fluorescent microscope. In addition, the chromosomes can be stained for G-banding or Q-banding using techniques known in the art.

The resulting metaphase chromosomes had fluorescent tags localized to those regions of the chromosome that were homologous to the EST. Thus, a particular EST was localized to a particular region on a given chromosome. In this manner, SEQ ID NOS 396, 485, 506, 1880 and 1894 were mapped using fluorescent in situ hybridization to locations on chromosomes 17, 7, 10 and 1 respectively (See Table 4B below). For a review of the technique see Verma et al., Human Chromosomes: A Manual of Basic Techniques. Pergamon Press, NY (1988), which is hereby incorporated by reference.

Table 4: Precise Chromosomal Localization of ESTs

		SEQ ID	EST#	Map Location
	A.	19	EST00023	6p
15		22	EST00301	6p
		1894	EST01643	6p21
		1	EST00007	6q
		224	EST00356	6q
		288	EST00219	6q
20	,	162	EST00133	Xp11.21 - Xp21.2
		1917	EST01029	Xp11.21 - Xp21.2
		1669	EST00827	Xq26 - Xq27.1
		1899	EST01014	Xq28
	в.	1880	EST01634	1q32
25		485	EST01466	7p13
		506	EST01471	10q11.2
		396	EST01443	17q25

5

10

#### EXAMPLE 8

# Automated DNA Sequencing Accuracy

ESTs that match human sequences in GenBank are excellent tools for the analysis of the accuracy of double-strand automated DNA sequencing. Ninety EST/GenBank matches were examined for the number of nucleotide mismatches and gaps required to achieve optimal alignment by the Genetics Computer Group (GCG) program BESTFIT (Devereux et al, Nucleic Acids Research 12: 387 (1984)).

-55-

The number of mismatches, insertions and deletions was counted for each hundred bases of the sequence (Table 5). As expected, the sequence quality was best closest to the primer and decreased rapidly after about 400 bases. The number of deletions and insertions relative to the GenBank reference sequence increased five- to ten-fold beyond 400 bases, while the number of mismatches doubled. The average accuracy rate for individual double-stranded sequencing runs was 97.7% to 400 bases.

5

TABLE 5. Accuracy Of Single-Run Double-Stranded Automated Sequencing

Bases fromPrimer	Mismatches/ Ambiquities <sup>+</sup>	Gaps	Percent	Aligned		
	Ambiquities	<u>Insertions</u>	<u>Deletions</u>	<u>Accurate</u>	Bases	
101 - 200 201 - 300 301 - 400 >400	1.45 1.72 2.07 3.53	0.18 0.25 0.98 2.63	0.19 0.11 0.37 1.06	98.2 97.9 96.6 92.8	8,800 8,130 5,404 3,197	

ESTs statistically identical to known human sequences and those matching mitochondrial and ribosomal genes were aligned with sequenced from GenBank using the GCG program BESTFIT. The first 85 nucleotides was polylinker sequence which was not aligned with the pBluescript SK reference sequence. Tabulation of errors began 15 bases into the BESTFIT alignment and thus is reported beginning with bases 101-200. \*Error rates are reported as number of mismatches, insertions, or deletions per hundred aligned bases. "Mismatches" includes ambiguous base calls.

10

15

#### EXAMPLE 9

### Probability of ESTs Containing Coding Sequences

The ESTs of the present invention were statistically evaluated using the coding-region prediction program CRM via the GRAIL server (Uberbacher, E. & Mural, R. Proc. Natl. Acad. Sci. USA, 88: 11261-5 (1991)). The CRM program uses a neural network to combine results from several different coding regions by looking at different 6 bp sequences found in coding exons and in introns. program additionally conducts reading frame searches and assesses randomness at the third position of codons. protocol categorizes sequences as having an excellent, good, marginal, or poor probability of containing coding The results are reported in Tables 6-9. There were 219 ESTs categorized as "excellent" (Table 6); 120 categorized as "good" (Table 7); 113 categorized as "marginal" (Table 8); and 1743 categorized as "poor" (Table These results indicate that most ESTs of the present invention comprise noncoding regions.

Table 6: ESTs with Excellent Probability of Containing Coding Sequence

SED ID#	CCT#	077	F0704007	1807 1809 1820 1829 1849 1860 1866 1871 1888 1890 1892 1903 1904 1914 1930 1944 1949 1962 1973 1977 1982 1993 2000 2001 2012 2013 2024 2043 2056 2058 2059 2064 2117 2128 2131 2134 2144 2145 2150 2155 2151 2138 2131 2134 2144 2145 2155 2257 2233 2235 2236 2255 2259 2263 SEQ 1D#			
SEQ ID#	E31#	9/3	ES101987	1807	EST00941	2373	S EST01393
7	EST0001/	7/7	E2101773	1809	EST00943	2374	EST01394
15	ES100014	980	ES101994	1820	EST00951	2393	EST01417
15	EST00020	950	ES102000	1829	EST00958	2394	EST01418
40	E3100271	1000	ES102014	1849	EST00975	2396	EST01420
02	ES100064	1004	EST02018	1860	EST00983		
66	EST0006/	1007	EST02021	1866	EST00989		
75	EST00074	1018	EST02032	1871	EST00994		
98	EST00260	. 1021	EST02035	1888	EST01005		
106	EST00092	1034	EST02050	1890	EST01007		
108	EST00094	1047	EST02063	1892	EST01000		
114	EST00098	1090	FST02109	1003	ESTRICTS		
115	EST00099	1096	EST02115	1904	EST01010		
124	EST00107	1115	EST02135	1904	E2101014		
128	ESTRO252	1110	ECT02133	1914	E5101026		
154	ECT00130	1110	E3102130	1930	ES101040		
166	EST00130	1129	E5102149	1944	EST01050		
144	ES100133	1133	E2105122	1949	EST01054		
100	ES100137	1141	EST02163	1962	EST01062		
174	£21005A0	1163	EST02187	1973	EST01071		
1/9	EST00145	1183	EST02208	1977	EST01075		
185	EST00148	1243	EST02272	1982	EST01080		
201	EST00163	1264	EST02293	1991	EST01088		
205	EST00165	1265	EST02294	1993	EST01090		
215	EST00172	1266	EST02295	2000	EST01097		
230	EST00181	1287	EST02317	2001	FSTD1008		
253	EST00199	1308	EST02338	2012	ESTOTOTO		
263	EST00203	1324	EST02354	2013	ECT01100		
268	EST00369	1344	EST02374	2013	EST01107		
270	EST00207	1356	FSTOZZIA	2024	ESTUTTT		
271	EST00283	1365	ECT02306	2043	ES101131		
273	ESTODEDS	1707	E0102370	2051	E2101128		
276	EST00200	1700	E3102413	2056	ES101142		
281	EST00211	1/01	E3102433	2058	ES101144		
295	ECT00274	1401	E3102433	2059	ES101145		
. 203	E2100200	1405	ES102439	2064	EST01149		
333	ES100394	1417	EST02452	2090	EST01167		
330	ES100397	1451	EST02487	2094	EST01171		
339	E\$100400	1457	EST02493	2116	EST01192		
302	ES100418	1463	EST02500	2117	EST01193		
389	ESTUU440	1473	EST02510	2128	EST01202		-
447	EST00481	1479	EST02516	2131	EST01205		
454	ES100493	1516	EST02555	2134	EST01208		
476	EST00509	1528	EST02569	2144	EST01216		
493	EST00522	1531	EST02572	2145	EST01217		
504	EST00529	1544	EST02586	2150	EST01222		
516	EST00538	1551	EST02593	2155	EST01227		
518	E\$100540	1558	EST02601	2161	EST01231		
551	EST01482	1561	EST02604	21.3	EST01238		
552	EST00565	1581	EST02625	21.74	EST01242		
559	EST00570	1586	EST02631	2176	EST01244		
582	EST00592	1591	EST02636	2180	ECT01255		
602	EST00606	1616	EST02661	221/	EST01233		
606	EST00609	1624	EST02670	2225	CCT01272		
608	EST00611	1630	EST02676	2227	ES101270		
621	ESTONAZO	1637	ECT.0704	2227	63101279		
435	EST00620	1630	E0100770	2233	ES101284		
642	EST00627	16/0	E2100777	2235	ES101286		
44.4	ECTUUESE	1047	ESTONOVO	2436	ES10128/		
697	ES100036	1001	E3100010	2255	EST01302		
700	ES1000/1	1677	ES100835	2259	EST01304		
700	EST00683	1682	EST00839	2263	EST01307		
743	EST00714	1694	EST00849	SEQ ID#	EST#		
				•			
	EST00726		EST00858	2267	EST01756		
	EST00729		EST00860	2281	EST01321		
	EST00761		EST00865		EST01322		
	EST01864	SEQ ID#	EST#		EST01333		
	EST00771		<del></del>		EST01335		
	EST01886	1718	EST00867		EST01335		
	EST01921		EST00879		EST01345		
930	EST01933		EST00887		EST01358		•
SEO ID#	EST#		EST00891		EST01362		
			EST00903		EST01365	•	
936	EST01939		EST00907		EST01371		
	EST01957		EST00909		EST01371		
	EST01978		EST00913		EST01379		•
			20.00713	2301	F3101300		

Table 7: ESTs with Good Probability of Containing Coding Sequence

SEQ ID#	EST#	1041	EST02057	2362	EST01383
		1083	EST02102	2378	EST01397
20	EST00024	1099	EST02118	2399	EST01423
72	EST00071	1105	EST02124	2407	EST02714
82	EST00078	1113	EST02133		
88	EST00084	1139	EST02161		
137	EST00272	1146	EST02168		
177	EST00328	1196	EST02221		
193	EST00156	1210	EST02238		
200	EST00162	1233	EST02262		
218	EST00175	1285	EST02314		
· 228	EST00179	1331	EST02361		
247	EST00279	1388	EST02421		
264	EST00204	1418	EST02453		
267	EST00297	1439	EST02475		
296	EST00228	1502	EST02540		
371	EST00426	1537	EST02578		
385	EST00436	1563	EST02606		
392	EST00442	1599	EST02644		
414	EST00460	1602	EST02647		
433	EST00474	1693	EST00848		
453	EST00492	1695	EST00850		
471	EST00505	1729	EST00877		
496	EST00525	1730	EST00878		
. 524	EST00544	1738	EST00883		
526	EST00546	1739	EST00885		
529	EST00549	1743	EST00888		
549	EST00563	1768	EST00908		
557	EST00569	1780	EST00916		
578	EST00588	1804	EST00938		
596	EST00602	1805	EST00939		
607	EST00610	1811	EST00945		
619	EST00619	1819	EST00950		
657	EST00646	1826	EST00956		
660	EST00649	1830	EST00959		
689	EST00673	1845	EST00971		
695	EST00679	1848	EST00974		
699	EST00682	1853	EST00977		
729	EST00703	1967	EST01066		
742	EST00713	1992	EST01089		
747	EST00717	1994	EST01091		
755	EST00723	SEQ ID#	EST#		
· 759	EST00725				
776	EST00738	1997	EST01094		
778	EST00740	2046	EST01134		
782	EST01551	2101	EST01177		
829	EST00768	2102	EST01178		
835	EST00772	2105	EST01181		
836	EST00773	2106	EST01182		
862	EST01872	2141	EST01213		
881	EST01881	2184	EST01251		
SEQ ID#	EST#	2196	EST01260		
		2203	EST01264		
884	EST01884	2232	EST01283		
924	EST01926	2308	EST01339		
929	EST01932	2345	EST01368		
938	EST01941	2346	EST01369		
971	EST01985	2351	EST01373		
995	EST02009	2354	EST01375		•
996	EST02010	2355	EST01376		
1031	EST02046	2359	EST01380		

Table 8: ESTs with Marginal Probability of Containing Coding Sequence

CDO TD#			
SEO ID#	EST#	1222	EST02251
11	ECTION 10	1224	EST02253
11 12	EST00018	1228	EST02257
24	EST00274	1267	EST02296
	EST00027	1301	EST02331
45 79	EST00364	1397	EST02431
90	EST00076 EST00302	1448	EST02484
110	EST00302	1480	EST02517
.44	EST00096	1493	EST02531
.45	EST00120	1499	EST02537
.92	EST00121	1503	EST02541
222	EST00133	1527	EST02568
234	EST00177	1536	EST02577
277	EST00134	1548 1562	EST02590
319	EST00381	1572	EST02605
368	EST00423	1575	EST02615 EST02618
370	EST00425	1595	EST02640
387	EST00438	1608	EST02640 EST02653
402	EST00451	1610	EST02655
415	EST00461	1621	EST02667
418	EST00464	1627	EST02674
426	EST00470	1629	EST02674 EST02677
503	EST00528	1631	EST02678
517	EST00539	1683	EST00840
522	EST00543	1692	EST00847
532	EST00551	1751	EST00895
540	EST00557	1756	EST00900
570	EST00580	1764	EST02690
573	EST00583	1770	EST00910
576	EST00586	1793	EST00929
613	EST00615	1847	EST00973
617	EST00617	1877	EST00998
626	EST00622	1897	EST01012
681	EST00665	1900	EST01015
726	EST00700	1939	EST01655
727	EST00701	1940	EST01046
738	EST00711	1954	EST01058
. 745	EST00715	SEQ ID#	EST#
. 752	EST00720		
791	EST00746	1990	EST01087
795	EST00749	2008	EST01103
803	EST00756	2031	EST01123
845	EST00777	2041	EST01130
852	EST00782	2044	EST01132
854	EST00784	2060	EST01146
907 912	EST01907	2100	EST01176
935	EST01912	2136	EST01210
SEO ID#	EST01938	2153	EST01225
SEO ID#	EST#	2204	EST01265
968	EST01981	2212	EST01270
985	EST01981	2248	EST01297
988	EST02002	2250	EST01299
1043	EST02002	2266	EST01310
. 1081	EST02100	2309 2347	EST01340
1089	EST02108	2347	EST01370
1116	EST02136	2398	EST01406
1134	EST02154	2398	EST01422 EST01427
1205	EST02233	2403	6310142/

Table 9: ESTs with Poor Coding Probability

"									
SEQ_ID#	EST#	103	EST00317	204	EST00235	309	EST00174	404	EST00453
		104	EST00354	206		315	EST00008	405	EST00454
1		105	EST00365	207		316	EST00378	406	EST00455
2		107	EST00093	209		317	EST00379	407	EST00456
3		109		210	EST00168	318	EST00380	408	EST00457
4	EST00011	111	EST00281	211	EST00332	320	EST00382	409	EST01444
5	EST00012	112	EST00318	212	EST00169	321	EST00383	410	EST00458
6	EST00013	113	EST00097	213	EST00170	322	EST00384	411	EST00459
8	EST00234	116	EST00100	214	EST00171	323	EST00385	412	EST01445
10	EST00016	117	EST00319	216	EST00173	325	EST00386	416	EST00462
14	EST00019	118	EST00101	219	EST00176	326	EST00387	417	EST00463
16		119	EST00102	220	EST00372	327	EST00388	419	
. 17	EST00022	120	EST00103	221	EST00359	328	EST00389		EST00465
18	EST00373	121	EST00104	224	EST00356	329	EST00390	420	EST00466
19	EST00023	122	EST00105	225	EST00338			421	EST00467
21	EST00025	123	EST00105	226	EST00178	330 331	EST00391	422	EST01447
23	EST00026	125	EST00108	229	EST00333		EST00392	423	EST00468
25	EST00028	126				332	EST00393	424	EST01448
			EST00109	231	EST00334	334	EST00395	425	EST00469
27	EST00029	127	EST00320	232	EST00182	335	EST00396	427	EST01449
28	EST00030	129	EST00321	233	EST00183	337	EST00398	428	EST01451
29	EST00031	130	EST00355	235	EST00185	340	EST00402	429	EST00471
30	EST00032	131	EST00322	236	EST00186	341	EST00403	431	EST00473
31	EST00033	133	EST00111	237	EST00187	342	EST00404	432	EST01452
32	EST00233	134	EST00375	238	EST00188	344	EST00405	434	EST00475
33	EST00034	135	EST00112	239	EST00189	345	EST00406	435	EST00476
34	EST00035	136	EST00113	240	EST00335	347	EST01829	436	EST00477
35	EST00036	138	EST00114	241	EST00191	348	EST01830	437	EST00478
36	EST00037	139	EST00116	242	EST00192	349	EST01831	438	EST00479
. 39	EST00039	140	EST00117	243	EST00193	350	EST00407	439	EST00480
- 40	EST00040	141	EST00118	244	EST00194	351	EST00408	440	EST01454
41	EST00041	142	EST00323	245	EST00347	352	EST00409	442	EST01456
42	EST00042	143	EST00119	246	EST00196	353	EST00410	443	EST00482
46	EST00044	146	EST00122	250	EST00197	354	EST01433	444	EST00482
• 47	EST00046	147	EST00292	252	EST00198	355	EST00411		EST00485
49	EST00047	148	EST00236	254	EST00200			446	
50	EST00047	149	EST00238			356	EST00412	447	EST00486
51				255	EST00201	357	EST00413	448	EST00487
	EST00049	150	EST00124	256	EST00345	358	EST00414	449	EST00488
52	EST00052	151	EST00125	257	EST00337	359	EST00415	450	EST00489
53	EST00054	152	EST00126	259	EST00202	360	EST00416	451	EST00490
. 54	EST00055	153	EST00127	260	EST00357	361	EST00417	452	EST00491
55	EST00056	154	EST00128	261	EST00338	363	EST00419	455	EST00494
56	EST00057	155	EST00129	262	EST00339	364	EST00420	457	EST00495
57	EST00058	157	EST00131	265	EST00205	365	EST01434	458	EST00496
58	EST00059	158	EST00132	266	EST00206	366	EST00421	459	EST00497
. 59	EST00061	159	EST00325	272	EST00340	367	EST00422	460	EST01457
60	EST00062	160	EST00326	274	EST00268	369	EST00424	461	EST01836
63	EST00065	162	EST00133	275	EST00209	372	EST00427	462	EST00498
64	EST00066	163	EST00134	278	EST00342	373	EST01832	464	EST00499
67	EST00351	165	EST00136	279	EST00213	374	EST00428	465	EST00500
68	EST00068	167	EST00138	280	EST00343	375	EST00429	466	EST00501
69	EST00360	168	EST00140	283	EST00215	376	EST01436	467	EST00502
71	EST00070	169	EST00141	284	EST00216	377	EST00430	468	EST00503
73	EST00072	170	EST00295	286	EST00217	378	EST00431	470	EST00504
74	EST00073	171	EST00327	287	EST00218	379	EST00432	SEQ ID#	EST#
76	EST00075	172	EST00142	288	EST00219	380	EST01439		<del></del>
80	EST00077	173	EST00143	289	EST00220	381	EST00433	473	EST00506
81	EST00315	175	EST00144	290	EST00221	382	EST00434	474	EST00507
83	EST00079	178	EST00294	291	EST00222	SEQ ID#	EST#	477	EST01463
84	EST00080	182	EST00329	292	EST00223	SER IDW	<u> </u>	478	EST00510
85	EST00081	184	EST00149	293	EST00224	383	ECTOD/35	479	
86	EST00081	185	EST00150	294		384	EST00435		EST00511
87	EST00083	186			EST00225 EST#		EST01440	480	EST01464
89	EST00085		EST00151	SEQ ID#	C31#	386	EST00437	481	EST00512
91		190	EST00153	205	ECTAMBA:	388	EST00439	482	EST01465
	EST00086	191	EST00154	295	EST00226		EST01442	483	EST00513
92	EST00087	194	EST00157	297	EST00230	391	EST00441	484	EST00514
94	EST00353	SEQ ID#	EST#	298	EST00231	393	EST00443	487	EST00516
75	EST00088			302	EST00303	395	EST00445	488	EST00517
96	EST00089	195	EST00158	303	EST00348	397		489	EST00518
99	EST00316	196	EST00159	304	EST00307	398	EST00447	490	EST00519
SEQ ID#	EST#	197	EST00160	305	E\$100308	399	EST00448	491	EST00520
_		198	EST00161	306	EST00309	400	EST00449	492	EST00521
100	EST00090	199	EST00277	307	EST00312	401	EST00450	495	EST00524
101	EST00091	203	EST00164	308	EST00314	403	EST00452	497	EST00526

498	EST01467	600	CCTO4/OO			700			
			EST01492	697	EST00680	799	EST00752	894	EST01894
499	EST01468	601	EST01493	698	EST00681	800	EST00753	895	EST01895
500	EST00527	603	EST01494	701	EST01522	801	EST00754	896	EST01896
501	EST02715	604	EST00607	702	EST00684	804	EST00757	897	
502	EST01469	605							EST01897
			EST00608	703	EST00685	805	E\$100758	898	EST01898
507	EST00530	609	EST01496	704	EST00686	806	EST00759	899	EST01899
508	EST00531	610	EST00612	705	EST00687	807	EST00760	900	EST01900
509	EST01472	611	EST00613						
				706	EST00688	809	EST00762	901	EST01901
510	EST00532	612	EST00614	708	EST00689	810	EST00763	902	EST01902
511	EST00533	615	EST00616	709	EST00690	811	EST00764	903	EST01903
512	EST00534	616	EST01497	710					
					EST00691	813	EST00765	904	EST01904
513	EST00535	618	EST01498	711	EST00692	814	EST00766	905	EST01905
514	EST00536	620	EST01499	712	EST00693	815	EST01855	906	EST01906
515	EST00537	622	EST01843	713	EST00694	816			
							EST01856	908	EST01908
519	EST00541	623	EST00621	714	EST00695	817	EST01857	909	EST01909
520	EST00542	624	EST01500	715	EST01523	818	EST01858	910	EST01910
521	EST01474	625	EST01844	716	EST01524	819	EST01859	911	EST01911
523	EST01838	627	EST00623						
				717	EST01525	820	EST01860	914	EST01914
525	EST00545	628	EST01503	718	EST00696	822	EST01863	915	EST01915
527	EST00547	629	EST00624	719	EST01526	825	EST01866	916	EST01917
528	EST00548	630	EST01505						
				720	EST00697	826	EST01867	917	EST01919
530	EST01477	631	EST00625	721	EST01527	827	EST01558	918	E\$T01920
531	EST00550	632	EST00626	722	EST01528	828	EST00767	920	EST01922
533	EST00552	633	EST00627	723	EST00698	830	EST01559		
								921	EST01923
534	EST01478	634	EST00628	725	EST00699	831	EST00769	922	EST01924
5 <b>3</b> 5	EST00553	636	EST01507	728	EST00702	832	EST00770	923	EST01925
536	EST01479	637	EST00630	730	EST00704	837	EST01561		
	EST00554							925	EST01927
537		638	EST00631	731	EST00705	838	EST00774	926	EST01929
538	EST00555	640	EST01509	732	EST00706	839	EST01562	927	EST01930
539	EST00556	641	EST00633	733	EST00707	840	EST00775	928	EST01931
541	EST00558								
		643	EST00635	734	EST00708	841	EST00776	931	EST01934
542	EST01480	645	EST00637	<i>7</i> 35	EST00709	842	EST01563	932	EST01935
543	EST00559	646	EST00638	736	EST01532	843	EST01564	933	EST01936
544	EST00560	647	EST00639	737		844			
					EST00710		EST01565	934	EST01937
545	EST01481	648	EST00640	739	EST01534	846	EST00778	937	EST01940
547	EST00561	649	EST00641	740	EST01535	847	EST00779	939	EST01943
548	EST00562	651	EST00643	741	EST00712	848	EST01566	SEQ ID#	EST#
550	EST00564	652						3CG 10#	E31#
			EST01510	744	EST01537	849	EST01567		
553	EST00566	654	EST00644	746	EST00716	850	EST00780	940	EST01944
555	EST01483	655	EST00645	748	EST01850	851	EST00781	941	EST01945
556	EST00568	454				•			
				71.0	ECTOR/10	CEU ID#	CCT#	0/3	ECTOID/7
		656	EST01513	749	EST00719	SEO 10#	EST#	942	EST01947
558	EST01484	658	EST00647	750	EST01539			943	EST01947 EST01948
558 560								943	EST01948
558 560	EST01484 EST01485	658 659	EST00647 EST00648	750 751	EST01539 EST01540	853	EST00783	943	EST01948 EST01949
558 560 561	EST01484 EST01485 EST00571	658 659 661	EST00647 EST00648 EST00650	750 751 754	EST01539 EST01540 EST00722	853 855	EST00783 EST00785	943 944 945	EST01948 EST01949 EST01950
558 560 561 562	EST01484 EST01485 EST00571 EST00572	658 659 661 662	EST00647 EST00648 EST00650 EST00651	750 751	EST01539 EST01540	853 855 856	EST00783 EST00785 EST01568	943 944 945 946	EST01948 EST01949 EST01950 EST01953
558 560 561 562 563	EST01484 EST01485 EST00571 EST00572 EST00573	658 659 661 662 663	EST00647 EST00648 EST00650 EST00651 EST00652	750 751 754	EST01539 EST01540 EST00722	853 855	EST00783 EST00785	943 944 945	EST01948 EST01949 EST01950
558 560 561 562	EST01484 EST01485 EST00571 EST00572	658 659 661 662	EST00647 EST00648 EST00650 EST00651 EST00652	750 751 754 SEQ ID#	EST01539 EST01540 EST00722 EST#	853 855 856 857	EST00783 EST00785 EST01568 EST01868	943 944 945 946 947	EST01948 EST01949 EST01950 EST01953 EST01954
558 560 561 562 563 564	EST01484 EST01485 EST00571 EST00572 EST00573 EST00574	658 659 661 662 663 664	EST00647 EST00648 EST00650 EST00651 EST00652 EST00653	750 751 754 <u>SEQ ID#</u> 756	EST01539 EST01540 EST00722 EST# EST01541	853 855 856 857 858	EST00783 EST00785 EST01568 EST01868 EST01869	943 944 945 946 947 949	EST01948 EST01949 EST01950 EST01953 EST01954 EST01958
558 560 561 562 563 564 565	EST01484 EST01485 EST00571 EST00572 EST00573 EST00574	658 659 661 662 663 664 665	EST00647 EST00648 EST00650 EST00651 EST00652 EST00653 EST00654	750 751 754 SEQ ID# 756 758	EST01539 EST01540 EST00722 EST# EST01541 EST00724	853 855 856 857 858 859	EST00783 EST00785 EST01568 EST01868 EST01869 EST01870	943 944 945 946 947 949 950	EST01948 EST01949 EST01950 EST01953 EST01954 EST01958 EST01959
558 560 561 562 563 564 565	EST01484 EST01485 EST00571 EST00572 EST00573 EST00574 EST00575 EST00576	658 659 661 662 663 664	EST00647 EST00648 EST00650 EST00651 EST00652 EST00653	750 751 754 <u>SEQ ID#</u> 756 758 761	EST01539 EST01540 EST00722 EST# EST01541 EST00724 EST01544	853 855 856 857 858 859 860	EST00783 EST00785 EST01568 EST01868 EST01869 EST01870 EST00786	943 944 945 946 947 949 950	EST01948 EST01949 EST01950 EST01953 EST01954 EST01958 EST01959 EST01962
558 560 561 562 563 564 565 566 566	EST01484 EST01485 EST00571 EST00572 EST00573 EST00574 EST00576 EST00577	658 659 661 662 663 664 665	EST00647 EST00648 EST00650 EST00651 EST00652 EST00653 EST00654	750 751 754 SEQ ID# 756 758	EST01539 EST01540 EST00722 EST# EST01541 EST00724	853 855 856 857 858 859	EST00783 EST00785 EST01568 EST01868 EST01869 EST01870	943 944 945 946 947 949 950	EST01948 EST01949 EST01950 EST01953 EST01954 EST01958 EST01959 EST01962
558 560 561 562 563 564 565	EST01484 EST01485 EST00571 EST00572 EST00573 EST00574 EST00576 EST00577	658 659 661 662 663 664 665 SEQ ID#	EST00647 EST00648 EST00650 EST00651 EST00652 EST00653 EST00654 EST#	750 751 754 <u>SEQ ID#</u> 756 758 761 762	EST01539 EST01540 EST00722 EST# EST01541 EST00724 EST01544 EST00727	853 855 856 857 858 859 860 861	EST00783 EST00785 EST01568 EST01868 EST01869 EST01870 EST00786 EST01871	943 944 945 946 947 949 950 953	EST01948 EST01949 EST01950 EST01953 EST01954 EST01958 EST01959 EST01962 EST01963
558 560 561 562 563 564 565 566 567 568	EST01484 EST01485 EST00571 EST00573 EST00573 EST00574 EST00576 EST00577 EST00578	658 659 661 662 663 664 665 SEQ ID#	EST00647 EST00648 EST00650 EST00651 EST00652 EST00653 EST00654 EST#	750 751 754 SEQ ID# 756 758 761 762 763	EST01539 EST01540 EST00722 EST# EST01541 EST00724 EST01544 EST00727 EST00728	853 855 856 857 858 859 860 861 863	EST00783 EST00785 EST01568 EST01869 EST01870 EST00786 EST00786 EST01871 EST01873	943 944 945 946 947 950 953 954 956	EST01948 EST01949 EST01950 EST01953 EST01954 EST01958 EST01959 EST01962 EST01963 EST01968
558 560 561 562 563 564 565 566 567 568 569	EST01484 EST01485 EST00571 EST00573 EST00574 EST00575 EST00576 EST00577 EST00578 EST00579	658 659 661 662 663 664 665 SEQ 10#	EST00647 EST00648 EST00650 EST00651 EST00652 EST00653 EST00654 EST# EST01514 EST00655	750 751 754 <u>SEQ 10#</u> 756 758 761 762 763 765	EST01539 EST01540 EST00722 EST# EST01541 EST00724 EST00724 EST00727 EST00728 EST00730	853 855 856 857 858 859 860 861 863 864	EST00783 EST00785 EST01568 EST01868 EST01869 EST01870 EST00786 EST01871 EST01873 EST00787	943 944 945 946 947 949 950 953 954 956	EST01948 EST01949 EST01953 EST01954 EST01958 EST01959 EST01962 EST01963 EST01968 EST01969
558 560 561 562 563 564 565 566 567 568	EST01484 EST01485 EST00571 EST00573 EST00573 EST00574 EST00576 EST00577 EST00578	658 659 661 662 663 664 665 SEQ 10# 666 667 668	EST00647 EST00648 EST00650 EST00651 EST00652 EST00653 EST00654 EST# EST01514 EST00655 EST00656	750 751 754 SEQ 1D# 756 758 761 762 763 765 766	EST01539 EST01540 EST00722 EST# EST01541 EST00724 EST00727 EST00728 EST00728 EST00730 EST00731	853 855 856 857 858 859 860 861 863 864	EST00783 EST00785 EST01568 EST01568 EST01869 EST01870 EST00786 EST01873 EST00787 EST00787	943 944 945 946 947 950 953 954 956 957 958	EST01948 EST01949 EST01950 EST01953 EST01954 EST01959 EST01962 EST01962 EST01968 EST01969 EST01969
558 560 561 562 563 564 565 566 567 568 569 SEQ 1D#	EST01484 EST01485 EST00571 EST00573 EST00573 EST00575 EST00576 EST00577 EST00578 EST00579	658 659 661 662 663 664 665 <u>SEQ 10#</u> 666 667	EST00647 EST00648 EST00650 EST00651 EST00652 EST00653 EST00654 EST# EST01514 EST00655	750 751 754 <u>SEQ 10#</u> 756 758 761 762 763 765	EST01539 EST01540 EST00722 EST# EST01541 EST00724 EST00724 EST00727 EST00728 EST00730	853 855 856 857 858 859 860 861 863 864	EST00783 EST00785 EST01568 EST01868 EST01869 EST01870 EST00786 EST01871 EST01873 EST00787	943 944 945 946 947 949 950 953 954 956	EST01948 EST01949 EST01953 EST01954 EST01958 EST01959 EST01962 EST01963 EST01968 EST01969
558 560 561 562 563 564 565 566 567 568 569	EST01484 EST01485 EST00571 EST00573 EST00574 EST00575 EST00576 EST00577 EST00578 EST00579	658 659 661 662 663 664 665 SEQ 10# 666 667 668	EST00647 EST00648 EST00650 EST00651 EST00652 EST00653 EST00654 EST# EST01514 EST01555 EST00656 EST00657	750 751 754 8EQ 10# 756 758 761 762 763 765 766 766	EST01539 EST01540 EST00722 EST# EST01541 EST00724 EST00727 EST00728 EST00730 EST00731 EST00731	853 855 856 857 858 859 860 861 863 864 865	EST00783 EST00785 EST01568 EST01868 EST01869 EST01870 EST00786 EST01871 EST01873 EST01569 EST01874	943 944 945 946 947 949 950 953 954 956 957 958	EST01948 EST01949 EST01953 EST01954 EST01958 EST01959 EST01962 EST01963 EST01968 EST01969 EST01970 EST01970
558 560 561 562 563 564 565 566 567 568 569 <u>SEQ 1D#</u>	EST01484 EST01485 EST00571 EST00572 EST00574 EST00576 EST00576 EST00577 EST00578 EST00579 EST#	658 659 661 662 663 664 665 <u>SEQ 10#</u> 666 667 668 669	EST00647 EST00648 EST00650 EST00651 EST00652 EST00653 EST00654 EST# EST01514 EST00655 EST00656 EST00656 EST00657 EST00658	750 751 754 SEQ 1D# 756 758 761 762 763 765 766 767 767	EST01539 EST01540 EST00722 EST# EST01541 EST00724 EST00727 EST00728 EST00730 EST00731 EST00732 EST00732	853 855 856 857 858 859 860 861 863 864 865 866	EST00783 EST00785 EST01568 EST01868 EST01869 EST01870 EST00786 EST01871 EST01873 EST00787 EST01569 EST01874 EST01875	943 944 945 946 947 949 950 953 954 956 957 958 959	EST01948 EST01949 EST01950 EST01953 EST01954 EST01958 EST01962 EST01963 EST01968 EST01969 EST01972 EST01972 EST01973
558 560 561 562 563 564 565 566 567 568 569 SEQ 1D#	EST01484 EST01485 EST00571 EST00572 EST00574 EST00576 EST00576 EST00577 EST00578 EST00579 EST#	658 659 661 662 663 664 665 <u>SEQ 10#</u> 666 667 668 669 670 671	EST00647 EST00648 EST00650 EST00651 EST00652 EST00653 EST00654 EST# EST01514 EST00655 EST00656 EST00656 EST00656 EST00658 EST00658	750 751 754 SEQ 1D# 756 758 761 762 763 765 766 767 768 770	EST01539 EST01540 EST00722 EST# EST01541 EST00724 EST00727 EST00728 EST00730 EST00731 EST00732 EST00733 EST00735	853 855 856 857 858 859 860 861 863 864 865 866 866	EST00783 EST00785 EST01568 EST01868 EST01869 EST01870 EST00786 EST01871 EST01873 EST00787 EST01569 EST01874 EST01875 EST01876	943 944 945 946 947 949 950 953 954 956 957 958 959 960 961	EST01948 EST01949 EST01950 EST01953 EST01954 EST01958 EST01959 EST01963 EST01968 EST01970 EST01970 EST01973 EST01973
558 560 561 562 563 564 565 566 567 568 569 SEQ 1D# 571 572 574	EST01484 EST01485 EST00571 EST00573 EST00574 EST00575 EST00576 EST00577 EST00578 EST00579 EST# EST00581 EST00582 EST00584	658 659 661 662 663 664 665 SEQ 1D# 666 667 668 669 670 671 672	EST00647 EST00648 EST00650 EST00651 EST00652 EST00654 EST00654 EST01514 EST00655 EST00656 EST00657 EST00657 EST00659 EST00660	750 751 754 SEQ ID# 756 758 761 762 763 765 766 767 768 770	EST01539 EST01540 EST00722 EST# EST01541 EST00724 EST00727 EST00728 EST00730 EST00731 EST00733 EST00735 EST00735 EST00735	853 855 856 857 858 859 860 861 863 864 865 866 867 868	EST00783 EST00785 EST01568 EST01869 EST01870 EST01871 EST01873 EST00787 EST01569 EST01874 EST01875 EST01876 EST01876 EST01876	943 944 945 946 947 950 953 954 957 958 959 960 961	EST01948 EST01949 EST01950 EST01953 EST01954 EST01958 EST01962 EST01963 EST01968 EST01969 EST01972 EST01972 EST01973
558 560 561 562 563 564 565 566 567 568 569 <u>SEQ 1D#</u> 571 572 574 575	EST01484 EST01485 EST00571 EST00572 EST00574 EST00576 EST00576 EST00577 EST00578 EST00579 EST#	658 659 661 662 663 664 665 <u>SEQ 10#</u> 666 667 668 669 670 671	EST00647 EST00648 EST00650 EST00651 EST00652 EST00653 EST00654 EST# EST01514 EST00655 EST00656 EST00656 EST00656 EST00658 EST00658	750 751 754 SEQ 1D# 756 758 761 762 763 765 766 767 768 770	EST01539 EST01540 EST00722 EST# EST01541 EST00724 EST00727 EST00728 EST00730 EST00731 EST00732 EST00733 EST00735	853 855 856 857 858 859 860 861 863 864 865 866 866	EST00783 EST00785 EST01568 EST01868 EST01869 EST01870 EST00786 EST01871 EST01873 EST00787 EST01569 EST01874 EST01875 EST01876	943 944 945 946 947 949 950 953 954 956 957 958 959 960 961	EST01948 EST01949 EST01950 EST01953 EST01954 EST01958 EST01969 EST01963 EST01969 EST01970 EST01977 EST01973 EST01974 EST01974
558 560 561 562 563 564 565 566 567 568 569 <u>SEQ 1D#</u> 571 572 574 575	EST01484 EST01485 EST00571 EST00573 EST00573 EST00576 EST00576 EST00577 EST00578 EST00578 EST00581 EST00581 EST00582 EST00584 EST00585	658 659 661 662 663 664 665 <u>SEQ 10#</u> 666 667 668 669 670 671 672	EST00647 EST00648 EST00650 EST00651 EST00652 EST00654 EST# EST01514 EST00655 EST00656 EST00657 EST00658 EST00658 EST00660 EST01515	750 751 754 <u>SEQ 1D#</u> 756 758 761 762 763 765 766 767 768 770 771	EST01539 EST01540 EST00722 EST# EST01541 EST00727 EST00728 EST00730 EST00731 EST00732 EST00733 EST00735 EST00736	853 855 856 857 858 859 860 861 863 864 865 866 867 868 869 870	EST00783 EST00785 EST01568 EST01868 EST01869 EST01870 EST00786 EST01873 EST00787 EST01569 EST01876 EST01876 EST01876 EST01876	943 944 945 946 947 950 953 954 956 957 958 959 960 961 962	EST01948 EST01949 EST01953 EST01954 EST01958 EST01959 EST01962 EST01963 EST01968 EST01968 EST01970 EST01970 EST01977 EST019775 EST019775 EST019776
558 560 561 562 563 564 565 566 567 568 569 SEQ 1D# 571 572 574 575	EST01484 EST01485 EST00571 EST00573 EST00573 EST00576 EST00576 EST00577 EST00578 EST00579 EST# EST00581 EST00582 EST00584 EST00585 EST00587	658 659 661 662 663 664 665 <u>SEQ 10#</u> 666 667 668 669 670 671 672 673	EST00647 EST00648 EST00650 EST00651 EST00652 EST00654 EST# EST01514 EST00656 EST00656 EST00657 EST00658 EST00658 EST00660 EST01515 EST01515	750 751 754 SEQ 10# 756 758 761 762 763 765 766 776 768 770 771 771	EST01539 EST01540 EST00722 EST# EST01541 EST00724 EST00727 EST00728 EST00731 EST00731 EST00735 EST00735 EST00736 EST00736	853 855 856 857 858 859 860 861 863 864 865 866 867 868 869 870	EST00783 EST00785 EST01568 EST01869 EST01870 EST00786 EST01871 EST01873 EST01874 EST01874 EST01876 EST01876 EST01876 EST018778 EST018778 EST01789 EST00789 EST00789	943 944 945 946 947 949 950 953 954 956 957 958 960 961 962 963	EST01948 EST01949 EST01950 EST01953 EST01954 EST01958 EST01952 EST01962 EST01963 EST01968 EST01970 EST01970 EST01977 EST019774 EST019776 EST019776 EST019776
558 560 561 562 563 564 565 566 567 568 569 SEQ 1D# 571 572 574 575 577 580	EST01484 EST01485 EST00571 EST00572 EST00574 EST00576 EST00577 EST00578 EST00579 EST# EST00581 EST00582 EST00585 EST00587 EST00587 EST00587 EST00587	658 659 661 662 663 664 665 <u>SEQ 10#</u> 666 667 668 669 670 671 672 673 674	EST00647 EST00648 EST00650 EST00651 EST00653 EST00654 EST# EST01514 EST00655 EST00655 EST00657 EST00658 EST00659 EST00660 EST01515 EST01516 EST01516	750 751 754 SEQ 1D# 756 758 761 762 763 765 766 767 770 771 772 774 775	EST01539 EST01540 EST00722 EST# EST01541 EST00724 EST00727 EST00730 EST00731 EST00733 EST00735 EST00735 EST00736 EST00736	853 855 856 857 858 859 860 861 863 864 865 866 867 868 869 870 871	EST00783 EST00785 EST01568 EST01868 EST01869 EST01870 EST00786 EST01871 EST01873 EST01569 EST01874 EST01876 EST01876 EST01876 EST00789 EST00789 EST00790 EST00791	943 944 945 946 947 949 950 953 954 956 957 958 960 961 962 963 964	EST01948 EST01949 EST01950 EST01953 EST01954 EST01958 EST01962 EST01963 EST01968 EST01976 EST01972 EST01977 EST01977 EST01977 EST01977 EST01977
558 560 561 562 563 564 565 566 567 568 569 SEQ 1D# 571 572 574 575 577 580 581	EST01484 EST01485 EST00571 EST00572 EST00574 EST00576 EST00577 EST00578 EST00579 EST# EST00581 EST00582 EST00584 EST00587 EST00587 EST00587 EST00590 EST00591	658 659 661 662 663 664 665 <u>SEQ 10#</u> 666 667 668 669 671 672 673 674 675 676	EST00647 EST00648 EST00650 EST00651 EST00652 EST00654 EST# EST01514 EST00656 EST00656 EST00657 EST00658 EST00658 EST00660 EST01515 EST01515	750 751 754 SEQ 10# 756 758 761 762 763 765 766 776 768 770 771 771	EST01539 EST01540 EST00722 EST# EST01541 EST00724 EST00727 EST00728 EST00731 EST00731 EST00735 EST00735 EST00736 EST00736	853 855 856 857 858 859 860 861 863 864 865 866 867 868 869 870	EST00783 EST00785 EST01568 EST01869 EST01870 EST00786 EST01871 EST01873 EST01874 EST01874 EST01876 EST01876 EST01876 EST018778 EST018778 EST01789 EST00789 EST00789	943 944 945 946 947 949 950 953 954 956 957 958 960 961 962 963	EST01948 EST01949 EST01950 EST01953 EST01954 EST01958 EST01952 EST01962 EST01963 EST01968 EST01970 EST01970 EST01977 EST019774 EST019776 EST019776 EST019776
558 560 561 562 563 564 565 566 567 568 569 SEQ 1D# 571 572 574 575 577 580	EST01484 EST01485 EST00571 EST00572 EST00574 EST00576 EST00577 EST00578 EST00579 EST# EST00581 EST00582 EST00585 EST00587 EST00587 EST00587 EST00587	658 659 661 662 663 664 665 <u>SEQ 10#</u> 666 667 668 669 670 671 672 673 674	EST00647 EST00648 EST00650 EST00651 EST00653 EST00654 EST# EST01514 EST00655 EST00655 EST00657 EST00658 EST00659 EST00660 EST01515 EST01516 EST01516	750 751 754 SEQ 1D# 756 758 761 762 763 765 766 767 770 771 772 774 775	EST01539 EST01540 EST00722 EST# EST01541 EST00724 EST00727 EST00730 EST00731 EST00732 EST00735 EST00735 EST00735 EST01546 EST01548 EST00737 EST00737 EST00737	853 855 856 857 858 859 860 861 863 864 865 866 867 868 869 870 871	EST00783 EST00785 EST01568 EST01868 EST01869 EST01870 EST00786 EST01871 EST01873 EST00787 EST01569 EST01874 EST01876 EST01876 EST00788 EST00788 EST00789 EST00790 EST00790	943 944 945 946 947 949 950 953 954 956 957 958 959 960 961 962 963 964	EST01948 EST01949 EST01953 EST01953 EST01954 EST01959 EST01968 EST01968 EST01976 EST01972 EST01973 EST01974 EST01975 EST01977 EST01977 EST01977 EST01979 EST01979
558 560 561 562 563 564 565 566 567 568 569 SEQ 1D# 571 572 574 575 577 580 581 583	EST01484 EST01485 EST00571 EST00573 EST00575 EST00576 EST00577 EST00578 EST00579 EST# EST00581 EST00582 EST00584 EST00585 EST00587 EST00590 EST00590 EST00591 EST00593	658 659 661 662 663 664 665 <u>SEQ 10#</u> 666 667 671 672 673 674 675 676	EST00647 EST00648 EST00650 EST00652 EST00653 EST00654 EST# EST01514 EST00655 EST00656 EST00657 EST00658 EST00659 EST00660 EST01515 EST01516 EST00661 EST00662 EST00662	750 751 754 <u>SEQ 1D#</u> 756 758 761 762 763 765 766 767 768 770 771 772 774 777	EST01539 EST01540 EST00722 EST# EST01541 EST00724 EST00727 EST00728 EST00731 EST00731 EST00735 EST00735 EST00736 EST00736 EST00736 EST00739 EST00739	853 855 856 857 858 859 860 861 863 864 865 866 867 868 870 871 872 873	EST00783 EST00785 EST01568 EST01868 EST01869 EST01870 EST00786 EST01871 EST01873 EST00787 EST01874 EST01876 EST01876 EST01876 EST01876 EST00790 EST00790 EST00790 EST00792 EST00792	943 944 945 946 947 950 953 954 956 957 958 960 961 962 963 964 966	EST01948 EST01949 EST01953 EST01954 EST01958 EST01959 EST01962 EST01963 EST01968 EST01968 EST01970 EST01972 EST01973 EST01975 EST01975 EST01977 EST01977 EST01977 EST01979 EST019780 EST01978
558 560 561 562 563 564 565 566 567 568 569 SEQ 1D# 571 572 574 575 577 580 581 583 584	EST01484 EST01485 EST00571 EST00573 EST00574 EST00576 EST00576 EST00577 EST00578 EST00579 EST# EST00581 EST00581 EST00584 EST00585 EST00587 EST00587 EST00590 EST00591 EST00594	658 659 661 662 663 664 665 <u>SEQ 10#</u> 666 667 668 670 671 672 673 674 675 676	EST00647 EST00648 EST00650 EST00651 EST00653 EST00654 EST# EST01514 EST00656 EST00657 EST00658 EST00658 EST00659 EST00660 EST01515 EST01516 EST00661 EST00663 EST00663 EST00663 EST00663	750 751 754 8EQ 10# 756 758 761 763 765 766 777 768 770 771 772 774 775 779 780	EST01539 EST01540 EST00722 EST# EST01541 EST00724 EST00727 EST00728 EST00731 EST00731 EST00733 EST00735 EST00735 EST01546 EST00736 EST00737 EST00737 EST00739 EST00737 EST00739	853 855 856 857 858 859 860 861 863 864 865 866 867 868 869 870 871 872 873 874	EST00783 EST00785 EST01568 EST01869 EST01869 EST01870 EST00786 EST01871 EST01873 EST01874 EST01874 EST01875 EST01876 EST00788 EST00789 EST00790 EST00791 EST00792 EST00793 EST00793	943 944 945 946 947 959 953 954 956 957 961 962 963 964 966 967	EST01948 EST01949 EST01953 EST01954 EST01958 EST01959 EST01962 EST01963 EST01968 EST01969 EST01970 EST01972 EST01973 EST01975 EST01975 EST01977 EST01979 EST01979 EST01979 EST01979 EST01988
558 560 561 562 563 564 565 566 567 568 569 SEQ 10# 571 572 574 575 577 580 581 583 584 585	EST01484 EST01485 EST00571 EST00573 EST00574 EST00576 EST00577 EST00578 EST00579 EST# EST00581 EST00582 EST00584 EST00591 EST00591 EST00593 EST00594 EST00595	658 659 661 662 663 664 665 <u>SEQ 10#</u> 666 667 668 669 670 671 672 673 674 675 676	EST00647 EST00648 EST00650 EST00651 EST00652 EST00653 EST00654 EST# EST01514 EST00655 EST00656 EST00657 EST00658 EST00659 EST00660 EST01515 EST01516 EST00661 EST00661 EST00663 EST00663 EST00663 EST00663 EST00517 EST01517	750 751 754 SEQ 10# 756 763 765 766 767 767 768 770 771 772 774 775 777 780 780	EST01539 EST01540 EST00722 EST#  EST01541 EST00724 EST00727 EST00728 EST00730 EST00731 EST00731 EST00735 EST00735 EST00735 EST00737 EST00737 EST00737 EST00737 EST00737 EST00737 EST00739	853 855 856 857 858 859 860 861 863 864 865 866 867 868 869 870 871 872 873 874 875 876	EST00783 EST00785 EST01568 EST01868 EST01870 EST00786 EST01871 EST01873 EST01873 EST01569 EST01874 EST01876 EST01876 EST01876 EST00789 EST00790 EST00790 EST00791 EST00792 EST00793 EST00795	943 944 945 946 947 959 953 954 956 957 958 960 961 962 963 964 966 967 970 972	EST01948 EST01949 EST01953 EST01953 EST01954 EST01958 EST01962 EST01963 EST01968 EST01969 EST01970 EST01972 EST01973 EST01974 EST01975 EST01977 EST01977 EST01977 EST01979 EST01988 EST01988
558 560 561 562 563 564 565 566 567 568 569 <u>SEQ 1D#</u> 571 572 574 575 577 580 581 583 584 585	EST01484 EST01485 EST00571 EST00572 EST00574 EST00576 EST00577 EST00578 EST00579 EST# EST00581 EST00582 EST00584 EST00587 EST00590 EST00591 EST00591 EST00594 EST00595 EST00596	658 659 661 662 663 664 665 <u>SEQ 10#</u> 666 667 668 670 671 672 673 674 675 676	EST00647 EST00648 EST00650 EST00651 EST00653 EST00654 EST# EST01514 EST00656 EST00657 EST00658 EST00658 EST00659 EST00660 EST01515 EST01516 EST00661 EST00663 EST00663 EST00663 EST00663	750 751 754 8EQ 10# 756 758 761 763 765 766 777 768 770 771 772 774 775 779 780	EST01539 EST01540 EST00722 EST# EST01541 EST00724 EST00727 EST00728 EST00731 EST00731 EST00733 EST00735 EST00735 EST01546 EST00736 EST00737 EST00737 EST00739 EST00737 EST00739	853 855 856 857 858 859 860 861 863 864 865 866 867 868 869 870 871 872 873 874	EST00783 EST00785 EST01568 EST01869 EST01869 EST01870 EST00786 EST01871 EST01873 EST01874 EST01874 EST01875 EST01876 EST00788 EST00789 EST00790 EST00791 EST00792 EST00793 EST00793	943 944 945 946 947 959 953 954 956 957 961 962 963 964 966 967	EST01948 EST01949 EST01953 EST01954 EST01958 EST01959 EST01962 EST01963 EST01968 EST01969 EST01970 EST01972 EST01973 EST01975 EST01975 EST01977 EST01979 EST01979 EST01979 EST01979 EST01988
558 560 561 562 563 564 565 566 567 568 569 SEQ 10# 571 572 574 575 577 580 581 583 584 585	EST01484 EST01485 EST00571 EST00573 EST00574 EST00576 EST00577 EST00578 EST00579 EST# EST00581 EST00582 EST00584 EST00591 EST00591 EST00593 EST00594 EST00595	658 659 661 662 663 664 665 <u>SEQ 10#</u> 666 667 668 669 670 671 673 674 675 676 677 678	EST00647 EST00648 EST00650 EST00651 EST00653 EST00654 EST# EST01514 EST00655 EST00656 EST00657 EST00659 EST00659 EST00660 EST01515 EST01516 EST00661 EST00661 EST00662 EST00663 EST00663 EST005117 EST001518 EST00664	750 751 754 SEQ 1D# 756 758 762 763 765 766 767 779 770 771 772 774 775 777 780 781 783	EST01539 EST01540 EST00722 EST#  EST01541 EST00724 EST01544 EST00727 EST00728 EST00730 EST00731 EST00735 EST00735 EST00737 EST00737 EST00737 EST00737 EST00736 EST01546 EST00737 EST00737 EST00739 EST00741 EST007550 EST01550	853 855 856 857 858 859 860 861 863 864 865 866 867 868 870 871 872 873 874 875 876	EST00783 EST00785 EST01568 EST01568 EST01869 EST01870 EST00786 EST01871 EST01873 EST01569 EST01569 EST01874 EST01876 EST00788 EST00789 EST00790 EST00791 EST00792 EST00792 EST00795 EST00795 EST00795 EST00795 EST00795	943 944 945 946 947 959 953 954 956 957 958 969 961 962 963 964 966 967 970 972 974	EST01948 EST01949 EST01953 EST01953 EST01954 EST01959 EST01962 EST01963 EST01968 EST01976 EST01972 EST01973 EST01974 EST01975 EST01977 EST01979 EST01979 EST01979 EST01988 EST01988 EST01988 EST01989
558 560 561 562 563 564 565 566 567 568 569 <b>SEQ 1D#</b> 571 572 574 575 577 580 581 583 584 585	EST01484 EST01485 EST00571 EST00573 EST00575 EST00576 EST00577 EST00578 EST00579 EST# EST00581 EST00582 EST00584 EST00584 EST00587 EST00590 EST00591 EST00591 EST00594 EST00595 EST00596 EST00596 EST00596 EST00596 EST00596	658 659 661 662 663 664 665 <u>SEQ 10#</u> 666 667 673 674 675 676 677 677 678 679 680 680	EST00647 EST00648 EST00650 EST00652 EST00653 EST00654 EST# EST01514 EST00655 EST00657 EST00658 EST00657 EST00660 EST01515 EST01516 EST00661 EST00663 EST01517 EST00664 EST00664	750 751 754 8EQ 10# 756 758 761 762 763 765 766 767 768 770 771 771 772 774 775 777 780 781 783 783	EST01539 EST01540 EST00722 EST#  EST01541 EST00724 EST00727 EST00728 EST00730 EST00731 EST00732 EST00735 EST00736 EST01546 EST00736 EST01548 EST00737 EST00739 EST00739 EST00739 EST00739 EST00759 EST01550 EST01550 EST01550	853 855 856 857 858 859 860 861 863 864 865 866 867 871 872 873 874 875 876 877	EST00783 EST00785 EST01568 EST01868 EST01869 EST01870 EST00786 EST01871 EST01873 EST00787 EST01874 EST01876 EST01876 EST01876 EST00790 EST00790 EST00790 EST00791 EST00792 EST00792 EST00792 EST00793 EST00794 EST00795 EST01877 EST01877	943 944 945 946 947 959 953 954 956 957 958 961 961 962 963 964 966 967 970 972 974 975	EST01948 EST01949 EST01953 EST01954 EST01958 EST01959 EST01963 EST01968 EST01968 EST01970 EST01977 EST01977 EST01977 EST01977 EST01977 EST01977 EST01979 EST01979 EST01979 EST01979 EST01979 EST01979 EST01979 EST01979 EST01979 EST01979 EST01979 EST01979 EST01980 EST01980 EST01980 EST01980
558 560 561 562 563 564 565 566 567 568 569 <u>569</u> 10# 571 572 574 575 577 580 581 583 584 585 586	EST01484 EST01485 EST00571 EST00573 EST00574 EST00576 EST00576 EST00577 EST00578 EST00579 EST# EST00581 EST00581 EST00585 EST00587 EST00591 EST00591 EST00593 EST00594 EST00596 EST00596 EST00597	658 659 661 662 663 664 665 <u>SEQ 10#</u> 666 667 670 671 672 673 674 675 676 677 678 679 680 682 683	EST00647 EST00648 EST00650 EST00651 EST00652 EST00653 EST00654 EST# EST01514 EST00655 EST00656 EST00657 EST00658 EST00660 EST01515 EST01516 EST00661 EST00663 EST00663 EST01517 EST00664 EST00664 EST006664 EST006666 EST006666	750 751 754 8EQ 10# 756 763 765 766 767 768 770 771 772 774 775 777 780 781 783 785 785	EST01539 EST01540 EST00722 EST#  EST01541 EST00724 EST00727 EST00728 EST00730 EST00731 EST00732 EST00733 EST00736 EST00736 EST01548 EST00736 EST01548 EST00737 EST00739 EST00739 EST00739 EST01550 EST01550 EST01550 EST01550 EST01553	853 855 856 857 858 859 860 861 863 864 865 866 867 868 870 871 872 873 874 875 876 877 878	EST00783 EST00785 EST01568 EST01868 EST01869 EST01870 EST00786 EST01871 EST01873 EST01874 EST01874 EST01875 EST01876 EST00789 EST00790 EST00791 EST00792 EST00792 EST00793 EST00794 EST00795 EST01877 EST01878 EST01878	943 944 945 946 947 959 953 954 956 957 961 962 963 964 966 967 972 974 975	EST01948 EST01949 EST01953 EST01954 EST01958 EST01959 EST01962 EST01963 EST01968 EST01969 EST01970 EST01970 EST01973 EST01975 EST01975 EST01976 EST01977 EST01979 EST01978 EST01978 EST01978 EST01979 EST01980 EST01988 EST01988 EST01988 EST01989 EST019890 EST019890 EST019991
558 560 561 562 563 564 565 566 567 568 569 SEQ 1D# 571 572 574 575 577 580 581 583 584 585 586 587	EST01484 EST01485 EST00571 EST00573 EST00574 EST00576 EST00576 EST00577 EST00578 EST00579 EST# EST00582 EST00581 EST00582 EST00584 EST00585 EST00587 EST00590 EST00590 EST00593 EST00594 EST00596 EST00597 EST00597 EST00597 EST00597 EST00597 EST00597 EST00597 EST00598	658 659 661 662 663 664 665 <u>SEQ 10#</u> 666 667 668 670 671 672 673 674 675 676 677 680 680 683 684	EST00647 EST00648 EST00650 EST00652 EST00653 EST00654 EST# EST01514 EST00655 EST00657 EST00658 EST00657 EST00660 EST01515 EST01516 EST00661 EST00663 EST01517 EST00664 EST00664	750 751 754 8EQ 10# 756 758 761 762 763 765 766 767 768 770 771 771 772 774 775 777 780 781 783 783	EST01539 EST01540 EST00722 EST#  EST01541 EST00724 EST00727 EST00728 EST00730 EST00731 EST00732 EST00735 EST00736 EST01546 EST00736 EST01548 EST00737 EST00739 EST00739 EST00739 EST00739 EST00759 EST01550 EST01550 EST01550	853 855 856 857 858 859 860 861 863 864 865 866 867 871 872 873 874 875 876 877	EST00783 EST00785 EST01568 EST01868 EST01869 EST01870 EST00786 EST01871 EST01873 EST00787 EST01874 EST01876 EST01876 EST01876 EST00790 EST00790 EST00790 EST00791 EST00792 EST00792 EST00792 EST00793 EST00794 EST00795 EST01877 EST01877	943 944 945 946 947 959 953 954 956 957 958 961 961 962 963 964 966 967 970 972 974 975	EST01948 EST01949 EST01953 EST01954 EST01958 EST01959 EST01963 EST01968 EST01968 EST01970 EST01977 EST01977 EST01977 EST01977 EST01977 EST01977 EST01979 EST01979 EST01979 EST01979 EST01979 EST01979 EST01979 EST01979 EST01979 EST01979 EST01979 EST01979 EST01980 EST01980 EST01980 EST01980
558 560 561 562 563 564 565 566 567 568 569 <u>569</u> 10# 571 572 574 575 577 580 581 583 584 585 586	EST01484 EST01485 EST00571 EST00573 EST00574 EST00576 EST00576 EST00577 EST00578 EST00579 EST# EST00581 EST00581 EST00585 EST00587 EST00591 EST00591 EST00593 EST00594 EST00596 EST00596 EST00597	658 659 661 662 663 664 665 <u>SEQ 10#</u> 666 667 670 671 672 673 674 675 676 677 678 679 680 682 683	EST00647 EST00648 EST00650 EST00651 EST00652 EST00653 EST00654 EST# EST01514 EST00656 EST00657 EST00658 EST00659 EST00660 EST01515 EST01516 EST00661 EST00661 EST00663 EST00663 EST00664 EST00664 EST006664 EST006667 EST006667 EST006667	750 751 754 8E0 10# 756 758 761 762 763 765 766 777 768 770 771 772 774 775 779 780 781 783 785 786	EST01539 EST01540 EST00722 EST#  EST01541 EST00724 EST00727 EST00728 EST00730 EST00731 EST00731 EST00735 EST00735 EST00736 EST00737 EST00737 EST00736 EST00736 EST00736 EST01548 EST00737 EST00739 EST00737 EST00739 EST00737 EST00739 EST00736 EST01553 EST01550 EST01553 EST01553 EST00742 EST00743	853 855 856 857 858 859 860 861 863 864 865 866 867 868 870 871 872 873 874 875 876 877 878 879 880	EST00783 EST00785 EST01568 EST01869 EST01870 EST01871 EST01873 EST01873 EST01874 EST01874 EST01876 EST01876 EST01876 EST00789 EST00790 EST00790 EST00791 EST00792 EST00794 EST00795 EST01878 EST01878 EST01878 EST01878 EST01878 EST01878	943 944 945 946 947 959 953 954 956 957 961 962 963 964 966 967 970 972 974 975	EST01948 EST01949 EST01953 EST01954 EST01958 EST01958 EST01962 EST01963 EST01968 EST01969 EST01970 EST01977 EST01977 EST01977 EST01977 EST01977 EST01979 EST01988 EST01988 EST01989 EST019991 EST019991 EST019991
558 560 561 562 563 564 565 566 567 568 569 SEQ 10# 571 572 574 577 580 581 583 584 585 586 587 588	EST01484 EST01485 EST00571 EST00573 EST00574 EST00576 EST00577 EST00578 EST00579 EST# EST00581 EST00582 EST00582 EST00584 EST00591 EST00591 EST00591 EST00596 EST00596 EST00597 EST00597 EST00597 EST00599 EST00599 EST00599	658 659 661 662 663 664 665 <u>SEQ 10#</u> 666 667 668 669 670 671 672 673 674 675 676 680 682 683 684	EST00647 EST00648 EST00650 EST00651 EST00652 EST00653 EST00654 EST# EST01514 EST00655 EST00656 EST00657 EST00659 EST00660 EST01515 EST00661 EST00661 EST00663 EST00664 EST00664 EST006664 EST006667 EST006668 EST006668 EST006668	750 751 754 SEQ 10# 756 758 761 762 763 765 766 767 779 780 771 779 780 781 783 785 786 787	EST01539 EST01540 EST00722 EST#  EST01541 EST00724 EST00727 EST00728 EST00730 EST00731 EST00732 EST00733 EST00735 EST00736 EST01546 EST01549 EST01550 EST01550 EST01552 EST01553 EST00743 EST00743	853 855 856 857 858 859 860 861 863 864 865 866 867 868 869 870 871 872 873 874 875 877 878 879 879 880 882	EST00783 EST00785 EST01568 EST01868 EST01869 EST01870 EST00786 EST01871 EST01873 EST01569 EST01874 EST01876 EST01876 EST00789 EST00790 EST00790 EST00790 EST00791 EST00792 EST00793 EST00795 EST01877 EST01877 EST01878 EST01878 EST01879 EST01879 EST01879 EST01880 EST01880 EST01880	943 944 945 946 947 959 953 954 956 957 958 960 961 962 963 964 966 967 970 972 974 975 976	EST01948 EST01949 EST01953 EST01954 EST01958 EST01959 EST01962 EST01963 EST01969 EST01972 EST01972 EST01973 EST01974 EST01977 EST01977 EST01977 EST019780 EST01980 EST01988 EST01988 EST01988 EST01989 EST019992 EST019995
558 560 561 562 563 564 565 566 567 568 569 <b>SEQ ID#</b> 571 572 574 575 577 580 581 583 584 585 589 589 590 591	EST01484 EST01485 EST00571 EST00573 EST00576 EST00576 EST00577 EST00578 EST00579 EST# EST00587 EST00582 EST00584 EST00584 EST00585 EST00590 EST00591 EST00591 EST00593 EST00595 EST00596 EST00597 EST00597 EST00597 EST00598	658 659 661 662 663 664 665 <u>SEQ 10#</u> 666 667 673 674 675 676 677 678 679 680 680 682 683 684	EST00647 EST00648 EST00650 EST00651 EST00652 EST00654 EST 00654 EST 00655 EST00656 EST00657 EST00657 EST00658 EST00659 EST00660 EST01515 EST01516 EST00661 EST00663 EST01517 EST01518 EST00664 EST00666 EST00667 EST00667 EST00667 EST00667	750 751 754 8EQ 10# 756 758 761 762 763 765 766 767 768 770 771 771 772 774 775 780 781 783 785 785 786 787	EST01539 EST01540 EST00722 EST#  EST01541 EST00724 EST00727 EST00728 EST00731 EST00730 EST00735 EST00735 EST00736 EST00736 EST00737 EST00737 EST00737 EST00737 EST00737 EST00737 EST00737 EST00737 EST00737 EST00739 EST00741 EST01550 EST01553 EST00744 EST00745	853 855 856 857 858 859 860 861 863 864 865 866 867 871 872 873 874 875 876 877 878 879 880 882 883	EST00783 EST00785 EST01568 EST01868 EST018670 EST01870 EST00786 EST01871 EST01873 EST00787 EST01874 EST01875 EST01874 EST01876 EST01876 EST00799 EST00799 EST00799 EST00799 EST00799 EST007979 EST00795 EST01877 EST01878 EST01878 EST01879 EST01882 EST01882 EST01882 EST01883	943 944 945 946 947 950 953 954 956 957 961 961 962 963 964 966 970 972 974 975 977 978 981	EST01948 EST01949 EST01953 EST01954 EST01958 EST01959 EST01962 EST01963 EST01968 EST01968 EST01970 EST01977 EST01977 EST01977 EST01977 EST01977 EST01978 EST01978 EST01978 EST01980 EST01988 EST01988 EST01988 EST01989 EST01999
558 560 561 562 563 564 565 566 567 568 569 <u>569</u> 571 572 577 580 581 583 584 585 586 587 588 589 590	EST01484 EST01485 EST00571 EST00573 EST00576 EST00576 EST00577 EST00578 EST00579 EST# EST00581 EST00582 EST00584 EST00585 EST00587 EST00591 EST00591 EST00594 EST00594 EST00596 EST00597 EST00597 EST00597 EST00598	658 659 661 662 663 664 665 SEQ 10# 666 667 670 671 673 674 675 676 677 678 679 680 682 683 684 685	EST00647 EST00648 EST00650 EST00651 EST00652 EST00653 EST00654 EST#  EST01514 EST00655 EST00656 EST00657 EST00658 EST00656 EST00660 EST01515 EST01516 EST00661 EST00662 EST00663 EST01517 EST01518 EST00664 EST00666 EST00667 EST00667 EST006670 EST00670	750 751 754 8EQ 10# 756 761 762 763 765 766 777 768 770 771 772 774 775 780 781 783 785 785 786 787 788	EST01539 EST01540 EST00722 EST#  EST01541 EST00727 EST00728 EST00730 EST00731 EST00732 EST00733 EST00736 EST01546 EST01546 EST01546 EST01546 EST01546 EST01553 EST01552 EST01553 EST00742 EST00744 EST00745 EST00745 EST00745	853 855 856 857 858 859 860 861 863 864 865 866 867 871 872 873 874 875 876 877 878 879 880 882 883	EST00783 EST00785 EST01568 EST01868 EST01869 EST01870 EST00786 EST01871 EST01873 EST00787 EST01876 EST01876 EST01876 EST00788 EST00789 EST00790 EST00791 EST00792 EST00793 EST00794 EST00795 EST01877 EST01878 EST01879 EST01879 EST01880 EST01883 EST01883 EST01883 EST01883	943 944 945 946 947 950 953 954 956 957 961 962 963 964 966 967 970 972 974 975 978 981 982 983	EST01948 EST01949 EST01953 EST01954 EST01958 EST01959 EST01962 EST01963 EST01969 EST01972 EST01972 EST01973 EST01974 EST01977 EST01977 EST01977 EST019780 EST01980 EST01988 EST01988 EST01988 EST01989 EST019992 EST019995
558 560 561 562 563 564 565 566 567 568 569 <b>SEQ ID#</b> 571 572 574 575 577 580 581 583 584 585 589 589 590 591	EST01484 EST01485 EST00571 EST00573 EST00576 EST00576 EST00577 EST00578 EST00579 EST# EST00587 EST00582 EST00584 EST00584 EST00585 EST00590 EST00591 EST00591 EST00593 EST00595 EST00596 EST00597 EST00597 EST00597 EST00598	658 659 661 662 663 664 665 <u>SEQ 10#</u> 666 667 673 674 675 676 677 678 679 680 680 682 683 684	EST00647 EST00648 EST00650 EST00651 EST00652 EST00654 EST 00654 EST 00655 EST00656 EST00657 EST00657 EST00658 EST00659 EST00660 EST01515 EST01516 EST00661 EST00663 EST01517 EST01518 EST00664 EST00666 EST00667 EST00667 EST00667 EST00667	750 751 754 8EQ 10# 756 758 761 762 763 765 766 767 768 770 771 771 772 774 775 780 781 783 785 785 786 787	EST01539 EST01540 EST00722 EST#  EST01541 EST00727 EST00728 EST00730 EST00731 EST00732 EST00733 EST00736 EST01546 EST01546 EST01546 EST01546 EST01546 EST01553 EST01552 EST01553 EST00742 EST00744 EST00745 EST00745 EST00745	853 855 856 857 858 859 860 861 863 864 865 866 867 871 872 873 874 875 876 877 878 879 880 882 883	EST00783 EST00785 EST01568 EST01868 EST01869 EST01870 EST00786 EST01871 EST01873 EST00787 EST01876 EST01876 EST01876 EST00788 EST00789 EST00790 EST00791 EST00792 EST00793 EST00794 EST00795 EST01877 EST01878 EST01879 EST01879 EST01880 EST01883 EST01883 EST01883 EST01883	943 944 945 946 947 950 953 954 956 957 961 962 963 964 966 967 970 972 974 975 978 981 982 983	EST01948 EST01949 EST01953 EST01954 EST01958 EST01958 EST01956 EST01962 EST01963 EST01968 EST01970 EST01977 EST01977 EST01977 EST01977 EST01977 EST01978 EST01978 EST01978 EST01979 EST019996 EST01989 EST01989 EST01989 EST01989 EST019996 EST019997
558 560 561 562 563 564 565 566 567 568 569 \$EQ 1D# 571 572 574 575 581 581 583 584 585 586 589 590 591 592 593	EST01484 EST01485 EST00571 EST00573 EST00573 EST00576 EST00576 EST00577 EST00578 EST00579 EST# EST00581 EST00581 EST00585 EST00585 EST00587 EST00590 EST00590 EST00591 EST00591 EST00595 EST00595 EST00596 EST00597 EST00597 EST00597 EST00598 EST00598 EST00599 EST00599 EST00599 EST00599 EST00599 EST00599 EST00599 EST00599 EST00599 EST00599 EST00599 EST00599 EST00599 EST00599 EST00590 EST00590 EST00590 EST00590	658 659 661 662 663 664 665 <u>SEQ 10#</u> 666 667 671 672 673 674 675 676 677 680 682 683 684 685 688	EST00647 EST00650 EST00651 EST00652 EST00653 EST00654 EST#  EST01514 EST00656 EST00657 EST00658 EST00659 EST00650 EST01515 EST01516 EST00661 EST00662 EST00663 EST01517 EST01664 EST00666 EST00667 EST00667 EST006670 EST00670 EST00670	750 751 754 756 758 761 762 763 765 766 777 778 777 779 780 781 783 785 786 787 788 787 788 789 790	EST01539 EST01540 EST00722 EST#  EST01541 EST00724 EST01544 EST00727 EST00728 EST00731 EST00732 EST00733 EST00735 EST00736 EST00737 EST00741 EST01554 EST01554 EST015554 EST015554 EST015554 EST015554 EST015544 EST00745	853 855 856 857 858 859 860 861 863 864 865 866 867 870 871 872 873 874 875 876 877 878 880 882 883 883	EST00783 EST00785 EST01568 EST01868 EST01869 EST01870 EST00786 EST01871 EST01873 EST01874 EST01874 EST01875 EST01876 EST00798 EST00790 EST00790 EST00791 EST00792 EST00795 EST00795 EST01878 EST01879 EST01878 EST01879 EST01880 EST01888 EST01888 EST01888 EST018887	943 944 945 946 947 950 953 954 956 957 961 962 963 964 966 967 970 972 974 975 978 981 982 983	EST01948 EST01949 EST01953 EST01954 EST01958 EST01958 EST01963 EST01963 EST01968 EST01969 EST01970 EST01977 EST01977 EST01977 EST01977 EST01977 EST01978 EST01978 EST01988 EST01988 EST01988 EST01989 EST01999 EST01999 EST01999
558 560 561 562 563 564 565 566 567 568 569 571 572 574 575 577 580 581 583 584 585 586 587 588 589 590 591	EST01484 EST01485 EST00571 EST00573 EST00574 EST00576 EST00576 EST00577 EST00578 EST00579 EST# EST00582 EST00581 EST00582 EST00584 EST00591 EST00591 EST00595 EST00596 EST00596 EST00597 EST00597 EST00599 EST00599 EST00599 EST00599 EST00599 EST00599 EST00599 EST00599 EST00599 EST00599 EST00590 EST00590 EST00590 EST00591 EST00590	658 659 661 662 663 664 665 SEQ 10# 666 667 668 669 670 671 672 673 674 675 676 677 680 682 683 684 685 686 686	EST00647 EST00650 EST00651 EST00652 EST00653 EST00654 EST# EST01514 EST00655 EST00656 EST00657 EST00658 EST00660 EST01515 EST00661 EST00661 EST00664 EST00664 EST00664 EST00667 EST00667 EST00667 EST00667 EST00670 EST00672 EST00674 EST00676	750 751 754 SEQ 10# 756 758 761 762 763 765 766 770 771 779 780 781 783 785 786 787 788 789 790 792	EST01539 EST01540 EST00722 EST#  EST01541 EST00724 EST00727 EST00728 EST00730 EST00731 EST00731 EST00735 EST00735 EST00736 EST00737 EST00737 EST00737 EST00737 EST00737 EST00744 EST01550 EST01550 EST01552 EST01553 EST015549 EST015549 EST0155549 EST0155549 EST0155549 EST0155549 EST0155549 EST0155549 EST015554 EST015554 EST007447 EST007448	853 855 856 857 858 859 860 861 863 864 865 867 868 869 870 871 872 873 874 875 876 877 878 878 879 880 882 883 885	EST00783 EST00785 EST01568 EST01869 EST01870 EST00786 EST01871 EST01873 EST01873 EST01876 EST01876 EST01876 EST01876 EST00789 EST00790 EST00790 EST00791 EST00792 EST00793 EST00794 EST00795 EST01877 EST01878 EST01879 EST01879 EST018880 EST018882 EST018882 EST01883 EST01887 EST01887 EST018887 EST018887 EST018887 EST018887 EST018887 EST018887 EST018887 EST018887 EST018887 EST018887	943 944 945 946 947 950 953 954 956 957 961 962 963 964 966 967 970 975 976 977 978 981 982 983	EST01948 EST01949 EST01953 EST01953 EST01954 EST01958 EST01959 EST01962 EST01963 EST01969 EST01970 EST01977 EST01977 EST01977 EST01977 EST01977 EST01978 EST01988 EST01988 EST01989 EST01999 EST01999 EST01999 EST01999 EST01999
558 560 561 562 563 564 565 566 567 568 571 572 574 575 577 580 581 583 584 585 586 587 588 589 590 591 592 593	EST01484 EST01485 EST00571 EST00573 EST00576 EST00576 EST00577 EST00578 EST00579 EST00587 EST00582 EST00584 EST005884 EST00585 EST00590 EST00591 EST00591 EST00593 EST00596 EST00597 EST00599	658 659 661 662 663 664 665 5EQ 10# 666 667 671 672 673 674 675 676 677 678 679 680 680 682 683 684 685 686 688	EST00647 EST00648 EST00650 EST00651 EST00652 EST00654 EST00654 EST00655 EST00656 EST00657 EST00657 EST00660 EST01515 EST00661 EST00663 EST00663 EST00664 EST00664 EST00666 EST00667 EST00667 EST00667 EST00672 EST00674 EST00674 EST00676 EST00676	750 751 754 8EQ 10# 756 758 761 762 763 765 766 767 768 770 771 771 772 774 775 780 781 783 785 786 787 783 785 787 788 789 790 792	EST01539 EST01540 EST00722 EST#  EST01541 EST00724 EST00727 EST00728 EST00730 EST00731 EST00732 EST00735 EST00736 EST00736 EST01546 EST00737 EST00737 EST00737 EST00737 EST00737 EST00741 EST01550 EST01552 EST01553 EST00744 EST00745 EST01554 EST00745 EST01555	853 855 856 857 858 859 860 861 863 864 865 866 867 871 872 873 874 875 876 879 880 882 883 885 887 889	EST00783 EST00785 EST01568 EST01868 EST01869 EST01870 EST00786 EST01871 EST00787 EST01873 EST00787 EST01876 EST01876 EST01876 EST00799 EST00799 EST00799 EST00799 EST00799 EST00799 EST00791 EST00795 EST01877 EST01878 EST01878 EST01889 EST01889 EST01889 EST01889 EST01889	943 944 945 946 947 950 953 954 956 957 961 962 963 964 966 970 972 974 975 977 978 981 982 983 984	EST01948 EST01959 EST01953 EST01954 EST01958 EST01959 EST01956 EST01963 EST01968 EST01969 EST01970 EST01977 EST01977 EST01977 EST01977 EST01977 EST01979 EST01978 EST01978 EST01979 EST01980 EST01980 EST01980 EST01999
558 560 561 562 563 564 565 566 567 568 569 571 572 577 580 581 583 584 585 586 587 588 589 590 591 592 593 595	EST01484 EST01485 EST00571 EST00573 EST00576 EST00576 EST00577 EST00578 EST00578 EST00579 EST00581 EST00581 EST00582 EST00587 EST00591 EST00591 EST00591 EST00591 EST00591 EST00599 EST00599 EST00597 EST00597 EST00597 EST00597 EST00598 EST00599 EST01488 EST00599 EST01489 EST00600 EST00601 EST00601 EST00603 EST00604	658 659 661 662 663 664 665 SEQ 10# 666 667 668 669 670 671 672 673 674 675 676 677 680 682 683 684 685 686 686	EST00647 EST00650 EST00651 EST00652 EST00653 EST00654 EST# EST01514 EST00655 EST00656 EST00657 EST00658 EST00660 EST01515 EST00661 EST00661 EST00664 EST00664 EST00664 EST00667 EST00667 EST00667 EST00667 EST00670 EST00672 EST00674 EST00676	750 751 754 SEQ 10# 756 758 761 762 763 765 766 770 771 779 780 781 783 785 786 787 788 789 790 792	EST01539 EST01540 EST00722 EST#  EST01541 EST00724 EST00727 EST00728 EST00730 EST00731 EST00731 EST00735 EST00735 EST00736 EST00737 EST00737 EST00737 EST00737 EST00737 EST00744 EST01550 EST01550 EST01552 EST01553 EST015549 EST015549 EST0155549 EST0155549 EST0155549 EST0155549 EST0155549 EST0155549 EST015554 EST015554 EST007447 EST007448	853 855 856 857 858 859 860 861 863 864 865 867 868 869 870 871 872 873 874 875 876 877 878 878 879 880 882 883 885	EST00783 EST00785 EST01568 EST01869 EST01870 EST00786 EST01871 EST01873 EST01873 EST01876 EST01876 EST01876 EST01876 EST00789 EST00790 EST00790 EST00791 EST00792 EST00793 EST00794 EST00795 EST01877 EST01878 EST01879 EST01879 EST018880 EST018882 EST018882 EST01883 EST01887 EST01887 EST018887 EST018887 EST018887 EST018887 EST018887 EST018887 EST018887 EST018887 EST018887 EST018887	943 944 945 946 947 950 953 954 956 957 961 962 963 964 966 967 970 975 976 977 978 981 982 983	EST01948 EST01959 EST01953 EST01954 EST01958 EST01959 EST01956 EST01963 EST01968 EST01969 EST01970 EST01977 EST01977 EST01977 EST01977 EST01977 EST01979 EST01978 EST01978 EST01979 EST01980 EST01980 EST01980 EST01999
558 560 561 562 563 564 565 566 567 568 571 572 574 575 577 580 581 583 584 585 586 587 588 589 590 591 592 593	EST01484 EST01485 EST00571 EST00573 EST00576 EST00576 EST00577 EST00578 EST00579 EST00587 EST00582 EST00584 EST005884 EST00585 EST00590 EST00591 EST00591 EST00593 EST00596 EST00597 EST00599	658 659 661 662 663 664 665 SEQ 10# 666 667 670 671 673 674 675 676 679 680 682 683 684 685 686 686 686 686 687 687 680 682 683 684 685 686 686 686 686 686 686 686 686 686	EST00647 EST00650 EST00651 EST00652 EST00653 EST00654 EST# EST01514 EST00655 EST00656 EST00657 EST00658 EST00660 EST01515 EST00661 EST00661 EST00664 EST00667 EST00667 EST00667 EST00667 EST00674 EST00677 EST00677 EST00677	750 751 754 8EQ 10# 756 758 761 762 763 765 766 767 768 770 771 772 774 775 780 781 783 785 785 786 787 788 787 788 787 788 787 788 787 788 789 790 792 793	EST01539 EST01540 EST00722 EST#  EST01541 EST00727 EST00728 EST00730 EST00731 EST00731 EST00735 EST00736 EST01546 EST01546 EST01546 EST01547 EST01550 EST01555 EST01554 EST015554 EST0744 EST0745 EST0745 EST0747 EST00747 EST00747 EST00747	853 855 856 857 858 859 860 861 863 864 865 866 867 871 872 873 874 875 876 877 878 879 880 882 883 885 887 889	EST00783 EST00785 EST01568 EST01868 EST01869 EST01870 EST00786 EST01871 EST01873 EST01873 EST01874 EST01874 EST01876 EST01876 EST01876 EST00790 EST00790 EST00791 EST00792 EST00793 EST00794 EST01877 EST01877 EST01878 EST01878 EST01883 EST01885 EST01885 EST01885 EST01889 EST01889 EST01890 EST01892	943 944 945 946 947 950 953 954 956 957 961 961 963 964 966 970 972 974 975 977 978 981 982 983 984 987	EST01948 EST01949 EST01950 EST01953 EST01954 EST01958 EST01959 EST01963 EST01968 EST01968 EST01970 EST01977 EST01977 EST01977 EST01977 EST01977 EST01978 EST01978 EST01978 EST01979 EST01979 EST01979 EST01979 EST01979 EST01999 EST01999 EST01999 EST01999 EST01999 EST01999 EST019996 EST01999 EST019996 EST019996 EST019997 EST019996
558 560 561 562 563 564 565 566 567 568 569 571 572 577 580 581 583 584 585 586 587 588 589 590 591 592 593 595	EST01484 EST01485 EST00571 EST00573 EST00576 EST00576 EST00577 EST00578 EST00578 EST00579 EST00581 EST00581 EST00582 EST00587 EST00591 EST00591 EST00591 EST00591 EST00591 EST00599 EST00599 EST00597 EST00597 EST00597 EST00597 EST00598 EST00599 EST01488 EST00599 EST01489 EST00600 EST00601 EST00601 EST00603 EST00604	658 659 661 662 663 664 665 5EQ 10# 666 667 671 672 673 674 675 676 677 678 679 680 680 682 683 684 685 686 688	EST00647 EST00648 EST00650 EST00651 EST00652 EST00654 EST00654 EST00655 EST00656 EST00657 EST00657 EST00660 EST01515 EST00661 EST00663 EST00663 EST00664 EST00664 EST00666 EST00667 EST00667 EST00667 EST00672 EST00674 EST00674 EST00676 EST00676	750 751 754 8EQ 10# 756 758 761 762 763 765 766 767 768 770 771 771 772 774 775 780 781 783 785 786 787 783 785 787 788 789 790 792 793	EST01539 EST01540 EST00722 EST#  EST01541 EST00724 EST00727 EST00728 EST00730 EST00731 EST00732 EST00735 EST00736 EST00736 EST01546 EST00737 EST00737 EST00737 EST00737 EST00737 EST00741 EST01550 EST01552 EST01553 EST00744 EST00745 EST01554 EST00745 EST01555	853 855 856 857 858 859 860 861 863 864 865 866 867 871 872 873 874 875 876 879 880 882 883 885 887 889	EST00783 EST00785 EST01568 EST01868 EST01869 EST01870 EST00786 EST01871 EST00787 EST01873 EST00787 EST01876 EST01876 EST01876 EST00799 EST00799 EST00799 EST00799 EST00799 EST00799 EST00791 EST00795 EST01877 EST01878 EST01878 EST01889 EST01889 EST01889 EST01889 EST01889	943 944 945 946 947 950 953 954 956 957 961 962 963 964 966 970 972 974 975 977 978 981 982 983 984	EST01948 EST01959 EST01953 EST01954 EST01958 EST01959 EST01956 EST01963 EST01968 EST01969 EST01970 EST01977 EST01977 EST01977 EST01977 EST01977 EST01979 EST01978 EST01978 EST01979 EST01980 EST01980 EST01980 EST01999

1363 EST02394
1364 EST02395
1366 EST02397
1367 EST02398
1368 EST02401
1372 EST02404
1375 EST02404
1375 EST02406
1376 EST02407
1377 EST02408
1378 EST02409
1379 EST02411
1381 EST02413

		-						
	992	EST02006	1086	EST02105	1184	EST02209	1274	EST02303
	994	EST02008	1087	EST02106	1185	EST02210	1275	EST02304
	997	EST02011	1088	EST02107	1186	EST02211	1276	EST02305
	999	EST02013	1091	EST02110	1187	EST02212	1278	EST02307
	1001	EST02015	1093	EST02112	1188	EST02213	1279	EST02308
	1002	EST02016	1095	EST02114	1189	EST02214	1280	EST02309
	1003	EST02017	1097	EST02116	1190	EST02215	1281	EST02310
	1005	EST02019	1098	EST02117	1191	EST02216	1282	EST02311
	1006	EST02020	1100	EST02119	1192	EST02217	1283	EST02312
	1008	EST02022	1101	EST02120	1193	EST02218	1284	EST02313
	1009	EST02023	1102	EST02121	1194	EST02219	1286	EST02316
	1010	EST02024	1104	EST02123	1195	EST02220	1288	EST02318
	1011	EST02025	1106	EST02125	1197	EST02222	1289	EST02319
	1012	EST02026	1107	EST02126	1198	EST02223	1290	EST02320
	1013	EST02027	1108	EST02127	1199	EST02224	1291	EST02321
	1014	EST02028	1109	EST02128	1200	EST02226	1292	EST02322
	1015	EST02029	1110	EST02129	1201	EST02228	1293	EST02323
	1016	EST02030	1111	EST02131	1202	EST02229	1294	EST02324
		EST02031	1112	EST02132	1203	EST02230	1295	EST02325
	1019	EST02033	1114	EST02134	1204	EST02232	1296	EST02326
	1022	EST02036	1117	EST02137	1206	EST02234	SEQ ID#	EST#
	1023	EST02037	1119	EST02139	1207	EST02235		
	1024	EST02038	1120	EST02140	1208	EST02236	1298	EST02328
	1025	EST02040	1121	EST02141	1209	EST02237	1299	EST02329
	1026	EST02041	1122	EST02142	SEQ ID#	EST#	1300	EST02330
	1027	EST02042	1123	EST02143	4544		1302	EST02332
٠	1028	EST02043	1124	EST02144	1211	EST02239	1303	EST02333
	1029	EST02044	1125	EST02145	1212	EST02240	1304	EST02334
	1030	EST02045	SEQ ID#	EST#	1213	EST02241	1305	EST02335
	1032	EST02048	1127	CCT021/7	1214	EST02242 EST02244	1306	EST02336
	1033 1036	EST02049 EST02052	1127 1128	EST02147 EST02148	1215 1216	EST02244	1307 1309	EST02337 EST02339
	SEQ ID#	EST#	1130	EST02150	1217	EST02246		EST02340
	JLE ID#	LUIW	1131	EST02151	1218	EST02247	1311	EST02341
	1037	EST02053	1132	EST02152	1219	EST02248	1313	EST02343
	1038	EST02054	1135	EST02155	1220	EST02249	1314	EST02344
	1040	EST02056	1136	EST02156	1221	EST02250	1315	EST02345
	. 1042	EST02058	1137	EST02157	1223	EST02252	1316	EST02346
	1044	EST02060	1138	EST02159	1225	EST02254	1317	EST02347
	1045	EST02061	1140	EST02162	1226	EST02255	1318	EST02348
	1046	EST02062	1142	EST02164	1227	EST02256	1319	EST02349
	1048	EST02064	1143	EST02165	1232	EST02261	1320	EST02350
	1049	EST02065	1144	EST02166	1234	EST02263	1321	EST02351
-	1050	EST02066	1145	EST02167	1235	EST02264	1322	EST02352
	1051	EST02067	1148	EST02170	1236	EST02265	1323	EST02353
	1052	EST02068	1149	EST02171	1237	EST02266	1325	EST02355
	1053	EST02069	1150	EST02172	1238	EST02267	1326	EST02356
	1054		1152	EST02174	1239	EST02268	1327	EST02357
	1055	EST02071	1153	EST02175	1240	EST02269	1328	EST02358
	1056	EST02072	1154	EST02176	1241	EST02270	1329	EST02359
	1057 1058	EST02073 EST02074	1155 1156	EST02177 EST02178	1242 1244	EST02271 EST02273	1330 1333	EST02360 EST02363
	1059	EST02075	1157	EST02180	1246	EST02275	1334	EST02364
	1060	EST02076	1158	EST02181	1247	EST02276	1335	EST02365
	1061	EST02078	1159	EST02182	1248	EST02277	1336	EST02366
	1062	EST02079	1160	EST02183		EST02278	1337	EST02367
	1063	EST02081	1161	EST02184	1250	EST02279	1338	EST02368
	1064	EST02082	1162	EST02185	1251	EST02280	1339	EST02369
	1065	EST02083	1164	EST02188	1252	EST02281	1342	EST02372
	1066	EST02084	1165	EST02189	1253	EST02282	1343	EST02373
	1067	EST02085	1166	EST02190	1254	EST02283	1345	EST02375
	1068	EST02086	1167	EST02191	1255	EST02284	1346	EST02376
	1070	EST02088	1168	EST02193	1256	EST02285	1347	EST02377
	1071	EST02089	1169	EST02194	1257	EST02286	1349	EST02379
	1072	EST02090	1170	EST02195	1258	EST02287	1350	EST02380
	1073	EST02091	1171	EST02196	1259	EST02288	1351	EST02381
	1074	EST02092	1172	EST02197	1260	EST02289	1352	EST02382
	1075	EST02093	1173	EST02198	1261	EST02290	1353	EST02383
	1076	EST02094	1174	EST02199	1262	EST02291	1354	EST02384
	1077	EST02096	1175	EST02200	1263	EST02292	1355	EST02385
	1078	EST02097	1176	EST02201 EST02202	1268	EST02297	1357	EST02387
	1079	EST02098	1177	EST02202	1269 1270	EST02298	1358	EST02388
	1080 1082	EST02099 EST02101	1178 1179	EST02204	1270	EST02299 EST02300	1359 1360	EST02390 EST02391
	1084	EST02101	1180	EST02204	1272	EST02300	1361	EST02392
	. 1085	EST02104	1182	EST02207	1273	EST02302	1362	EST02393
		_5.56.104	1102				.502	

SEQ ID#	EST#	1485	EST02522	1592	EST02637	1689	EST00845	1799	EST00934
		1486	EST02523	1593		1690			
1384	EST02416	1487	EST02524	1594		1691		1800	EST00935
1387	EST02419	1488					EST01577	1801	EST00936
1389	EST02422			1596		1696		1802	EST00937
		1489	EST02526	1597		1697	EST00852	1803	EST01613
1390	EST02423	1490	EST02527	1598	EST02643	1702	EST00854	1806	E\$T00940
1391	EST02424	1491	EST02529	1600	EST02645	1703	EST00855	1808	EST00942
1392	EST02425	1494	EST02532	1601	EST02646	1705			
1393	EST02426	1497	EST02535				EST00856	1810	EST00944
1394	EST02427			1603		1707		1812	EST02693
		1498		1604		1709	EST00859	1813	EST00946
1396	EST02430	1501	EST02539	1605		1711	EST00861	1814	EST00947
1398	EST02432	1504	EST02542	1606	EST02651	1712	EST00862	1815	EST01615
1400	EST02434	1506	EST02545	1607		1713	EST00863		
1402	EST02436	1507	EST02546	1609	EST02654			1816	EST00948
1403	EST02437	1508	EST02547			1714	EST00864	1817	EST00949
1404				1611	EST02656	1717	EST00866	1818	EST01616
	EST02438	1509	EST02548	1612	EST02657	1719	EST00868	1821	EST00952
1406	EST02440	1510	EST02549	1613	EST02658	1720	EST00869	1822	EST00953
1407	EST02441	1512	EST02551	1614	EST02659	1721	EST00870	1823	
1410	EST02444	1513	EST02552	1615	EST02660	1722			EST00954
1411	EST02445	1514	EST02553				EST00871	1824	EST01617
1414	EST02448			1617	EST02662	1723	EST00872	1825	EST00955
1415		1515	EST02554	1618	EST02663	1724	EST00873	1827	EST01618
	EST02449	1517	EST02558	1619	EST02665	1725	EST00874	1828	EST00957
1416	EST02450	1518	EST02559	1620	EST02666	1727	EST00875	1831	EST01619
1419	EST02454	1519	EST02560	1622	EST02668	1728	EST00876		
1420	EST02456	1520	EST02561	1623				1832	EST00960
1421	EST02457	1521			EST02669	1732	EST01590	1833	EST00961
			EST02562	1625	EST02672	1733	EST01591	1835	EST00962
1422	EST02458	1522	EST02563	1626	EST02673	1734	EST00880	1836	EST01622
1423	EST02459	1523	EST02564	1628	EST02675	1735	EST00881	1837	EST00963
1424	EST02460	1524	EST02565	1632	EST02679	1736	EST01592		
1425	EST02461	1525	EST02566	1633	EST02680			1838	EST00964
1426	EST02462	1526				1737	EST00882	1839	EST00965
1428			EST02567	1634	EST02681	1740	EST02687	1840	EST00966
	EST02464	1529	EST02570	1635	EST02682	1741	EST00886	1841	EST00967
1429	EST02465	1530	EST02571	1636	EST02684	1744	EST00889	1842	EST00968
1431	EST02467	1532	EST02573	1638	EST00798	1745	EST00890	1843	EST00969
1432	EST02468	1533	EST02574	1640	EST00800	1747	EST00892	1844	
1433	EST02469	1534	EST02575	1641	EST00801	1748			EST00970
1434	EST02470	1535	EST02576	1642			EST00893	1846	EST00972
1435	EST02471				EST00802	1749	EST01593	1850	EST01624
		1538	EST02579	1643	EST00803	1750	EST00894	1851	EST00976
1436	EST02472	1539	EST02580	1645	EST00804	1752	EST00896	1854	EST00978
1437	EST02473	1540	EST02581	1646	EST00805	1753	EST00897	. 1855	EST00979
1438	EST02474	1541	EST02582	1647	EST00806	1754			
1440	EST02476	1542	EST02583	1648	EST00807			1857	EST00980
1442	EST02478	1545	EST02587			1755	EST00899	1858	EST00981
1443				1650	EST00809	1757	EST01594	1859	EST00982
	EST02479	1546	EST02588	1652	EST00811	1758	EST00901	1861	EST00984
1444	EST02480	1547	EST02589	1653	EST00812	1759	EST00902	1862	EST00985
1445	EST02481	1549	EST02591	1655	EST00813	1761.		1863	EST00986
1446	EST02482	1550	EST02592	1656	EST00814	1762	EST00904		
1447	EST02483	1552	EST02594	1657	EST00815			1864	EST00987
1450	EST02486	1553	EST02595			1763	EST00905	1865	EST00988
1452				1658	EST00816	1765	ESTO1600	1867	EST00990
	EST02488	1554	EST02597	1659	EST00817	1766	EST00906	1868	EST00991
1453	EST02489	1555	EST02598	1660	EST00818	1772	EST02691	1870	EST00993
1454	EST02490	1556	EST02599	1661	EST00819	1773	EST00911	1872	EST00995
1455	EST02491	1557	EST02600	1662	EST00820	1774	EST00912		
1456	EST02492	1559	EST02602	1663	EST00821			1873	EST01630
1458	EST02495	1560				1775	EST02692	1874	EST00996
1459	EST02496		EST02603	1664	EST00822	1776	EST01603	1875	EST01631
		1564	EST02607	1665	EST00823	1778	EST00914	1876	EST00997
1460	EST02497	1565	EST02608	1666	EST00824	1779	EST00915	SEQ ID#	EST#
1461	EST02498	1568	EST02611	1668	EST00826	1781	EST00917	324 .07	
1462	EST02499	1569	EST02612	1669	EST00827	1782	EST00918	1070	FREARCOC
1464	EST02501	1570	EST02613	1670				1878	EST00999
1466	EST02503				EST00828	1783	EST00919	1879	EST01633
		1571	EST02614	1671	EST00829	SEQ ID#	EST#	1881	EST01000
1467	EST02504	1573	EST02616	1672	EST00830			1882	EST01638
1469	EST02506	1574	EST02617	1673	EST00831	1784	EST00920	1883	EST01001
1470	EST02507	1576	EST02619	1674	EST00832	1785	EST00921	1884	
1471	EST02508	1577	EST02620	SEQ ID#	EST#	1786			EST01002
1472	EST02509	1578	EST02621	222 10#	-01#		EST00922	1886	EST01003
1474				4/34		1787	EST00923	1887	EST01004
	EST02511	1579	EST02622	1675	EST00833	1788	EST00924	1889	EST01006
1475	EST02512	1580	EST02623	1676	EST00834	1789	EST00925	1891	EST01008
1476	EST02513	SEQ ID#	EST#	1678	EST00836	1790	EST00926	1893	EST01642
1477	EST02514			1679	EST00837	1791	EST00927		
1481	EST02518	1582	EST02626	1680	EST00838			1895	EST01010
1482	EST02519	1583	EST02628			1792	EST00928	1898	EST01013
SEQ ID#	EST#			1684	EST00841	1794	EST01607	1899	EST01014
DE 10#	F31W	1584	EST02629	1685	EST00842	1795	EST00930	1901	EST01016
4.07		1585	EST02630	1686 .	EST01574	1796	EST00931	1902	EST01017
1483	EST02520	1587	EST02632	1687	EST00843	1797	EST00932	1905	
1484	EST02521	1590	EST02635	1688	EST00844	1798	EST00933		EST01020
				,000	_0.00077	1770	C3100333	1906	EST01021

190		2016 ES	T01110	211	B EST01194	2223	EST01742	2332	EST01794
190		2018 ES	ST01111	2119	9 EST01195	2224			
190		2019 ES	ST01112	212	2 EST01197	2228		2335	
191		2020 ES	T01113	212		2229		2336	
1917		2021 ES	T01114	2124		2231		2337	
1913	5 EST01646		T01115	2125		2237		2340	
1915	EST01027		T01116	2126		2238			
1916			T01118		EST01201	2239		2341	
1917			T01119	2129				2343	
1918			T01120	2130			EST01291	2344	
1919			T01121			2241		2349	
1920				2132		2242	EST01292	2350	
1921			T01682	2133			EST01293	2352	EST01374
			T01122	2135		2244		2356	EST01377
1922			T01684		EST01211	2246		2357	EST01378
1923			T01124	2139		2247	EST01296	2360	EST01381
1924			T01125	2140		2249	EST01298	2361	EST01382
1925			T01126	2142	EST01214	2251	EST01300		EST01384
1926			T01686	2143	EST01215	2252		2364	EST01385
1927	' EST01037	2038 ES	T01127	2147		2253		2365	
1929		2039 ES	T01128	2148	EST01220	2256	EST02718		EST01387
1932	EST01042	2040 ES	T01129	2151		2257		2369	
1934	EST01043		T01688	2152	EST01224	2258	EST01754	2370	EST01811
1935	EST01044		101133	2154	EST01226	2260			EST01390
1936			T01135	2154	EST01718		EST01305	2371	EST01391
1937			101136	2157	E0101710	2261		2372	
1938			r01689			2262	EST01306	2375	EST01815
1941				2170	EST01228	2264	EST01308	2376	EST01395
1942			r01137 r01139		EST01229	2265	EST01309	2377	EST01396
1943				2160		2268	EST01311	2379	EST01398
1945			r01140		EST01232	2269	EST01312	2380	EST01399
			r01141	2163	EST01233	2270	EST01313	2381	EST01400
1946		2055 ES1	101690	2164	EST01234	2271	EST01314	2382	EST01401
1947		2057 ES1		2165	EST01720	2272	EST01762	2383	EST01402
1948			01147	2166	EST01236	2273	EST01315	2384	EST01403
1950	EST01055		02701	2167	EST01237	2275	EST01316	2385	EST01816
1951	EST01056		01148	2169	EST01722	2276	EST01317	2386	EST01404
1952	EST01057	2065 EST	01691	2170	EST01239	2277	EST01318	2387	EST01405
1955	EST01662	2066 EST	01692		EST01240	2278	EST01319	5	-0107403
1957	EST01059		01693	2172	EST01241		EST01320		
1958	EST01060		01150	2175	EST01243	2280	EST01763		
1959	EST01061		01151		EST01245	2284	EST01323		
1963	EST01063		01152	2178	EST01726	SEQ_ID#	EST#		
1964	EST01064		01698	2170	EST01246	JLW IDH	E31#		
1966	EST01065		01153	2180	EST01247	2285	EST01768		
1968	EST01067		02702	2181	EST01248	2287			
1969	EST01068		01154	SEQ ID#	EST#		EST01770		
1970	EST01666		01155	SEE ID#	E31#	2288	EST01324		
1971	EST01069		01156	2192	EST01249	2290	EST01772		
1972	EST01070		01157	2183		2291	EST01773		
1975	EST01073	SEQ ID# EST		2185	EST01250		EST01326		
1976	EST01074	2F4 1DH F21	**		EST01252	2293	EST01327		
1978	EST01076	2081 EST	04450		EST01253	2294	EST01328		
1979	EST01077		01158 01159		EST01727		EST01329		
SEQ ID#					EST01254	2296	EST01330		
10#	EST#		01160		EST01728	2298	EST01331		
1980	EST01078		01161		EST01256		EST01332		
1981	EST01078		01162		EST01258		EST01334		
1983	EST01079	2086 EST		2194	EST01729	2304	EST01780		
1984		2087 EST	01164		EST01259		EST01336		
	EST01082		01166		EST01261		EST01337		
1985	EST01083		01168	2198	EST01730	2310	EST01341		
1986	EST01084		01170	2199	EST01262		EST01342		
1988	EST01085		01701		EST01731	2312	EST01343		
1989	EST01086		01172	2201	EST01263		EST01344		
1995	EST01092		01173		EST01732		EST01346		•
1996	EST01093		01174		EST01735		EST01782		
1998	EST01095		1175	2206	EST01736	==:=	EST01347		
1999	EST01096		1179	2208	EST01267		EST01348		
2002	EST01099	2104 EST	1180		EST02717		EST01349		
2003	EST01675	2107 EST			EST01268		EST01350		
2005	EST01100		01184	2211	EST01269		EST01351		
2006	EST01101		1185		EST01271		EST01789		
2007	EST01102	2110 EST			EST01273		EST01353		
2009	EST01677		1187	2218	EST01274	2327	EST01354		
2010	EST01104		1188	2219	EST01275	2322	EST01355		
2011	EST01105		1189	2220	EST01740		EST01792		
2014	EST01108		1190	2221	EST01740				
2015			1191	2222	EST01276		EST01793		
	//	E113 E310		LECK	231012/0	2331	EST01356		

EST#
EST01407
EST01415
EST01416
EST01419
EST01421
EST01424
EST01425
EST01426
EST02713
EST00273

10

15

20

#### EXAMPLE 10

# Functional Groupings of ESTs and Corresponding Genes

By matching new human ESTs to known sequences from other species, the apparent function of the gene corresponding to the EST can be ascertained. The data generated in Example 3 and 4 have been used to categorize 127 of the ESTs of the present invention, and their corresponding genes, into predicted functional groups. (These 127 are ESTs with database matches to sequences from other species for which a function was known.) Two different grouping schemes have been used.

The first scheme separates the sequences into three broad categories: metabolic; regulatory; and structural. These groupings are set out in Table 10.

The second grouping scheme separates the sequences into 13 specific categories: cell surface proteins; developmental control; energy metabolism; kinases and phosphatases; oncogenes; other metabolism-related polypeptides; peptidases and peptidase inhibitors; receptors; structural and cytoskeletal; signal transduction; transporters; transcription, translation, and subcellular localization; and transcription factors. These groupings are set out in Table 11.

Table 10: Three-Class Functional Groupings of ESTs

SEQ ID	EST#	Group	Putative Identification
	EST01620	M	AMP deaminase, brain
	EST00289		Aconitase
	EST00675	М	Alcohol dehydrogenase
	EST01700	M	Anion exchanger homolog AE3
	EST01443	M	CDPdiacylglycerol-serine O-phosphatidyltransfera
	EST01663	M	Ca2+-transporting ATPase 2
1039	EST02055	M	Calcium channel
2192	EST01257	M	Diacylglycerol kinase, lymphyocyte
1441	EST02477	M	Diamine acetyltransferase
2289	EST01325	M	Fatty acid synthase
310	EST00377	M	Fo ATPase beta subunit, mitochondrial
1667	EST00825	M	Gamma-aminobutyric acid transporter
1412	EST02446	M	Glutamate-aspartate carrier protein
1020	EST02034	M	Glutaminase
2326	EST01791	M	Inositol-1,4,5-trisphosphate 3-kinase
2173	EST01724	M	Lon protease
1427	EST02463	M	Long-chain-fatty-acid-CoA ligase
2226	EST01744	M	NAD(P) + transhydrogenase (B-specific)
	EST02609	M	Neutrophil oxidase factor
1681	EST01573	M	Nucleoside diphosphate kinase
2254	EST01751	M	Phosphatidylinositol-4,5-bisphosphate phosphodie
93	EST00287	M	Processing enhancing protein
2297	EST01775	M	Prohormone cleavage enzyme
9	EST00376	M	Prolyl endopeptidase
1654	EST01572	M	Protochlorophyllide reductase
	EST00374	M	RNA polymerase II 6th subunit (RPO26)
1715	EST01583	M	Ribosomal protein L18a
	EST01627	M	Ribosomal protein Lla
	EST01667	M	Ribosomal protein L3
	EST00300	M	Ribosomal protein L30
	EST00301	M	Ribosomal protein \$10
	EST01826	M	Ribosomal protein S10
	EST01459	M	Ribosomal protein YL10
	EST01697	М	Succinate dehydrogenase flavoprotein
	EST01715	М	Succinate dehydrogenase flavoprotein
	EST01601	M	Thiosulfate sulfurtransferase (rhodanese)
	EST01711	M	Valine-tRNA ligase
	EST01588	M	XPR2 alkaline extracellular protease
	EST01913	M	Clathrin coat assembly protein AP50 homolog
	EST02051	M	J1 protein
	EST01982	R	ADP-ribosylation factor 1
	EST02146	R	Calbindin D28
	EST01645		Calmodulin
	EST01466		Calmodulin-dependent protein kinase, type II, be
2302	EST01779	R	Discs-large tumor suppressor
188	EST00256	R	Enhancer of split
1229	EST02258	R	KUP protein
993	EST02007	R	Kinase 5 protein
	EST01764	R	Lamin B receptor
SEQ ID		Group	Putative Identification
161	ECTO 0247	D	MADOVO (manifestard and a) and as a state of the state of the
	EST00247	R	MARCKS (myristoylated alanine-rich protein kinas
	EST00734	R	MARCKS homolog
	EST02418	Ŕ	MARCKS homolog
	EST00259 EST01961	R	Notch/Xotch
		R	Notch/Xotch
	EST02429	R	Nuclear factor 1-like protein (NF1)
	EST01806	R	Prohibitin
	EST02087 EST01650	R R	Protein kinase C, zeta
1933	m0101000	I.	Protein phosphatase 2A beta subunit

```
202 EST00298 R
                             Protein-tyrosine phosphatase LRP
  1478 EST02515 R
                             Rab5
  1408 EST02442 R
300 EST00232 R
                             Seven in absentia
                             Transforming protein (dbl)
  1147 EST02169 R
                             Tyrosine kinase
                             cAMP-dependent protein kinase inhibitor
  1348 EST02378 R
  1931 EST01041 R
1413 EST02447 R
37 EST00038 R
                             cAMP-regulated phosphoprotein
                             cAMP-specific phosphodiesterase
                             ras p21-like small GTP-binding protein (smq GDS)
   102 EST00248 R
                             rho H12/ ARH12
   299 EST00249 R
                             smg p25A GDP dissociation inhibitor
   189 EST00282 R
                             trkB
  1332 EST02362 R
1277 EST02306 R
                             GA binding protein, beta subunit
                             Bib protein
    43 EST00371 R
                            Maternal G10 protein
  1704 EST01580 R
                             Myeloid differentiation primary response gene My
   346 EST01828 R
187 EST00152 R
                             Otd homeotic protein
                            Wilm's tumor-related protein
   249 EST00275 R
                             Zinc Finger Proteins
   413 EST01446 R
                             Zinc Finger Proteins
  469 EST01460 R
833 EST01560 R
1230 EST02259 R
                             Zinc Finger Proteins
                             Zinc Finger Proteins
                            Zinc finger proteins
  1496 EST02534 R
                             Zinc finger proteins
  2324 EST01352 R
208 EST00250 S
2320 EST01784 S
                            Zinc Finger Proteins
                            60K filarial antigen 60K filarial antigen
   251 EST00370 S
                            Actin, other
  2146 EST01218 S
248 EST00271 S
891 EST01891 S
                            Actin, other
                            Actinin, alpha
Actinin, alpha
  1500 EST02538 S
                            Actinin, alpha
  132 EST00110 S
1852 EST01625 S
1965 EST01664 S
                            Agrin
                            Agrin
                            Amyloid A4
                            Amyloid A4
  2068 EST01694 S
  2408 EST00244 S
                            Amyloid A4
  1880 EST01634 S
2004 EST01676 S
                    S
                            Axonal glycoprotein TAG-1
                            Cofilin
   650 EST00642 S
                            Dilute (myosin heavy chain)
  2217 EST01738 S
                            Gelation factor ABP-280
  1885 EST01639 S
77 EST00257 S
                            Histocompatibility antigen modifier 1
                            Kinesin
SEQ ID EST#
                    Group Putative Identification
                             78 EST00258 S
                            Kinesin
  2245 EST01748 S
                            Kinesin
   313 EST00276 S
                            Lysosomal membrane glycoprotein 1 (LAMP-1)
  223 EST00368 S
824 EST01865 S
2032 EST01683 S
                            Microtubule-associated protein 1B
                            Microtubule-associated protein 1B
                            Microtubule-associated protein 1B
  2017 EST01678
                            Milk fat globule membrane protein
  1567 EST02610 S
                            Neural cell adhesion molecule L1
  506 EST01471
2368 EST01389
                    S
                            Neuraxin
                    S
                            Radial spoke protein 3
                            Spectrin, beta
   951 EST01960
                    s
  2089 EST01699 S
                            Sperm membrane protein
   653 EST01512 S
311 EST00270 S
594 EST01490 S
                            Tubulin, alpha
Tubulin, beta
Tubulin, beta
   757 EST01542 S
                            Tubulin, beta
  1245 EST02274 S
1589 EST02634 S
1468 EST02505 S
                            Tubulin, beta
Tubulin, beta
                            Matrin 3
```

-70-

1371 EST02402 S Talin 1701 EST00853 S Unc-104

Group Key: M: Metabolic, R: Regulatory, S: Structural

Table 11: Thirteen-Class Functional Groupings of ESTs

SEQ ID	EST#	Group	Putative Identification
208	EST00250	CS	60K filarial antigen
2320	EST01784	CS	60K filarial antigen
1965	EST01664	CS	Amyloid A4
2068	EST01694	CS	Amyloid A4
2408	EST00244	CS	Amyloid A4
1880	EST01634	CS	Axonal glycoprotein TAG-1
1885	EST01639	CS	Histocompatibility antigen modifier 1
313	EST00276	CS	Lysosomal membrane glycoprotein 1 (LAMP-1)
2017	EST01678	CS	Milk fat globule membrane protein
1567	EST02610	CS	Neural cell adhesion molecule L1
2368	EST01389	CS	Radial spoke protein 3
2089	EST01699	CS	Sperm membrane protein
1277	EST02306	DC	Bib protein
188	EST00256	DC	Enhancer of split
43	EST00371	DC	Maternal G10 protein
1704	EST01580	DC	Myeloid differentiation primary response gene MyD1
227	EST00259	DC	Notch/Xotch
952	EST01961	DC	Notch/Xotch
346	EST01828	DC	Orthodentical homeotic protein
1408	EST02442	DC	Seven in absentia
97	EST00289	EM	Aconitase
· 310	EST00377	EM	Fo ATPase beta subunit, mitochondrial
485	EST01466	KP	Calmodulin-dependent protein kinase, type II, beta
. 993	EST02007	KP	Kinase 5 protein
1069	EST02087	KP	Protein kinase C, zeta
1933	EST01650	KP	Protein phosphatase 2A beta subunit
202	EST00298	KP	Protein-tyrosine phosphatase LRP
1348	EST02378	KP	cAMP-dependent protein kinase inhibitor
2302	EST01779	OG	Discs-large tumor suppressor
2353	EST01806	OG	Prohibitin
1478	EST02515	OG	Rab5
300	EST00232	OG	Transforming protein (dbl)
37	ESTO0038	OG	ras p21-like small GTP-binding protein (smg GDS)
102	EST00248	OG	rho H12/ ARH12
1834	EST01620	OM	AMP deaminase, brain
691	EST00675	OM	Alcohol dehydrogenase
396	EST01443	OM	CDPdiacylglycerol-serine O-phosphatidyltransferase
2192	EST01257	OM	Diacylglycerol kinase, lymphyocyte
1441 2289	EST02477	OM	Diamine acetyltransferase
1020	EST01325 EST02034	OM OM	Fatty acid synthase Glutaminase
2326			
2326 1427	EST01791 EST02463	OM OM	Inositol-1,4,5-trisphosphate 3-kinase
2226	EST02403 EST01744	OM	Long-chain-fatty-acid-CoA ligase
1566	EST01744 EST02609	OM	NAD(P) + transhydrogenase (B-specific) Neutrophil oxidase factor
1681	EST02009 EST01573	OM	Nucleoside diphosphate kinase
1001	E9101717	OI41	radicoside dipilospilate killase

SEO ID	For#	C	
SEQ ID	EST#	Group	Putative Identification
2254	EST01751	ОМ	Dhoenheeidelineitel A.C.L. to the state of the
1654	EST01731 EST01572	OM	Phosphatidylinositol-4,5-bisphosphate phosphodiest
2073	EST01697	OM	Protochlorophyllide reductase
2138	EST01715	OM	Succinate dehydrogenase flavoprotein
1771	EST01601	OM	Succinate dehydrogenase flavoprotein
2173	EST01724	PI	Thiosulfate sulfurtransferase (rhodanese) Lon protease
2297	EST01775	PI	
9	EST00376	PI	Prohormone cleavage enzyme Prolyl endopeptidase
1726	EST01588	PI	XPR2 alkaline extracellular protease
1147	EST02169	PP	Tyrosine kinase
2282	EST01764	RT	Lamin B receptor
189	EST00282	RT	trkB
251	EST00370	SC	Actin, other
2146	EST01218	SC	Actin, other
248	EST00271	SC	Actinit, other Actinin, alpha
891	EST01891	SC	Actinin, alpha
1500	EST02538	SC	Actinin, alpha
1300	EST02538	SC	Actinin, aipina Agrin
1852	EST01625	SC	Agrin
2004	EST01676	SC	Cofilin
650	EST00642	SC	Dilute (myosin heavy chain)
2217	EST01738	SC	Gelation factor ABP-280
77	EST00257	SC	Kinesin
78	EST00257	SC	Kinesin
2245	EST01748	SC	Kinesin
1468	EST02505	SC	Matrin 3
223	EST00368	SC	Microtubule-associated protein 1B
824	EST01865	SC	Microtubule-associated protein 1B
2032	EST01683	SC	Microtubule-associated protein 1B
506	EST01471	SC	Neuraxin
951	EST01960	SC	Spectrin, beta
. 1371	EST02402	SC	Talin
653	EST01512	SC	Tubulin, alpha
311	EST00270	SC ·	Tubulin, beta
594	EST01490	SC	Tubulin, beta
757	EST01542	SC	Tubulin, beta
1245	EST02274	SC	Tubulin, beta
1589	EST02634	SC	Tubulin, beta
1701	EST00853	SC	Unc-104
969	EST01982	ST	ADP-ribosylation factor 1
1126	EST02146	ST	Calbindin D28
1910	EST01645	ST	Calmodulin
161	EST00247	ST	MARCKS (myristoylated alanine-rich protein kinase
769	EST00734	ST	MARCKS homolog
1386	EST02418	ST	MARCKS homolog
1931	EST01041	ST	cAMP-regulated phosphoprotein
1413	EST02447	ST	cAMP-specific phosphodiesterase
299	EST00249	ST	smg p25A GDP dissociation inhibitor
			O 1 O GIOCOTATION NUMBERON

SEQ ID	EST#	Group	Putative Identification
2092	EST01700	TP	Anion exchanger homolog AE3
1956	EST01663	TP	Ca2+-transporting ATPase 2
1039	EST02055	TP	Calcium channel
1667	EST00825	TP	Gamma-aminobutyric acid transporter
1412	EST02446	TP	Glutamate-aspartate carrier protein
913	EST01913	TT	Clathrin coat assembly protein AP50 homolog
1035	EST02051	TT	J1 protein
93	EST00287	TT	Processing enhancing protein
38	EST00374	TT	RNA polymerase II 6th subunit (RPO26)
1715	EST01583	TT	Ribosomal protein L18a
1856	EST01627	TT	Ribosomal protein L1a
1974	EST01667	TT	Ribosomal protein L3
301	EST00300	TT	Ribosomal protein L30
22	E\$T00301	TT	Ribosomal protein S10
2402	EST01826	TT	Ribosomal protein S10
463	EST01459	TT	Ribosomal protein YL10
2121	EST01711	TT	Valine-tRNA ligase
1332	EST02362	TX	GA binding protein, beta subunit
1229	EST02258	TX	KUP protein
1395	EST02429	TX	Nuclear factor 1-like protein (NF1)
187	EST00152	TX	Wilm's tumor-related protein
249	EST00275	TX	Zinc Finger Proteins
413	EST01446	TX	Zinc Finger Proteins
469	EST01460	TX	Zinc Finger Proteins
833	EST01560	TX	Zinc Finger Proteins
1230	EST02259	TX	Zinc finger proteins
1496	EST02534	TX	Zinc finger proteins
2324	EST01352	TX .	Zinc Finger Proteins

Group Key: CS: Cell Surface, DC: Developmental Control, EM: Energy Metabolism, KP: Kinases and Phosphatases, OG: Oncogenes, OM: Other Metabolism, PI, Peptidases and Peptidase Inhibitors, RT: Receptors, SC: Structural and Cytoskeletal, ST: Signal Transduction, TP: Transporters, TT: Transcription, Translation, and Subcellular Localization, TX: Transcription Factors.

#### EXAMPLE 11

### cDNA Libraries Generated From Specific Genomic DNA by Exon Expression & Amplification

5

10

15

20

25

30

35

Exon amplification was used to express potential exons from genomic DNA in a recombinant vector that contains some of the signals necessary for splicing. If an exon is present in the proper orientation in the vector, that exon will be spliced in a mammalian cell and will become part of the mRNA of that cell. The exon splice-product can be purified from other mRNA in the cell by conversion of the mRNA to cDNA and selective amplification of the recombinant splice-product cDNAs. Cosmid DNA from human chromosome 19q13.3 was digested with BamHI or BamHI/Bg1II restriction enzymes. The fragments generated were collected and size specifically cloned into an expression vector (Buckler, et al. Proc. Nat'l. Acad. Sci. USA, 88:4005-4009 (1991)). After transfection electroporation of these constructs into COS cells, transcripts were generated using the SV40 early promoter and a polyadenylation signal derived from SV40 both present in the expression vector. When a fragment of genomic DNA contains an entire exon with flanking intron sequence in the sense orientation, the exon should be retained in the mature poly(A) + cytoplasmic RNA. Therefore, the mRNA was used as template for cDNA synthesis using reverse transcriptase and vector-priming. Subsequently, the cDNAs were amplified by vector-priming using PCR. A fraction of this first PCR product was reamplified using internal vector-primers containing terminal cloning sites. These products were endrepaired with T4 DNA polymerase, digested with appropriate restriction enzymes, gel purified and cloned into pBluescript vectors. The constructs were transfected into XL1-Blue competent cells and plated on LB/Xgal/IPTG/ampicillin plates. White colonies were selected and expanded to prepare DNA templates as described in Example 2.

-75-

When multiple cosmids or YAC clones were used as the source DNA, a pool of specific expressed exons was obtained as a cDNA library. The EST/cDNAs sequenced from this specific library are disclosed herein as SEQ ID NOS: 2412-2417.

5

#### EXAMPLE 12

## PCR Amplification from Predicted Exons

10

15

Computational analyses can be applied to genomic DNA sequences to predict protein coding regions. region prediction program CRM (E. Uberbacher and R. Mural, Proc. Natl. Acad. Sci. USA 88:11261-5 (1991)) finds open reading frames and classifies them according to their probability of being coding regions. These regions are subsequently examined using the GM program (C. Fields and C. Soderlund, Comp. Applic. Biosci. 6: 263, 1990), predicts intron-exon structure. PCR primers are then designed to amplify the predicted exons and used to test human cDNA libraries (for example, fetal brain or placental libraries) for the presence of these putative exons using a PCR assay.

25

20

This strategy has been successfully applied in two large scale genomic sequencing projects, the Huntington's locus of human chromosome 4p16.3 (McCombie, et al., submitted) and human chromosome locus 19q13.3 (Martin-Gallardo, et al., submitted). Sequences from eleven predicted exons from chromosome 4 were present in tested cDNA libraries, indicating that this region has at least two and probably three expressed genes. In one case, the method resulted in an amplification product which spanned two predicted exons. (SEQ ID NO: 2411.) When sequenced, this PCR product indicated the presence of the two exons from which the primers were initially chosen, as well as an intervening exon which was also predicted by the CRM program, but not the intervening genomic sequences. In a similar fashion, the presence of the two predicted genes in the chromosome 19

35

30

-76-

sequence was confirmed by sequencing PCR products. SEQ ID NO 2410, includes a partial exon of one of these genes.

#### EXAMPLE 13

#### Complete Sequence of EST Clone Inserts

5

10

15

20

25

30

35

There are a number of methods known to those with skill in the art of molecular biology, to obtain sequence information from the cDNAs corresponding to the sequences. Procedures for these methods are provided in Basic Methods in Molecular Biology (David et al. supra). One way to acquire more information about the cDNA from which an EST was derived is to sequence the remainder of the cDNA The complete sequence of the inserts of four EST clones (representing SEQ ID NOs 188, 189, 223, and 227) was determined using Exonuclease III deletions. Briefly, EST clones were digested with the restriction enzymes SalI and KpnI or PstI and BamHI (for deletions from the Forward primer and Reverse primer ends of the insert, respectively). KpnI and PstI enzymes leave 3' sticky ends following digestion, which Exonuclease III is unable to bind. results in unidirectional deletions into the cDNA insert leaving the vector sequence undisturbed. After addition of Exonuclease III to the Forward and Reverse deletion reactions, aliquots of the reaction were removed at defined time intervals and the reaction was stopped to prevent further deletion. S1 nuclease and Klenow DNA polymerase were added to create blunt ended fragments suitable for ligation.

Samples for each time point was purified by electrophoresis through an agarose gel and religated. Two to four representative clones from each time point in each direction were sequenced to give between 200 and 400 base pairs of sequence data. Careful selection of deletion conditions and time points allow a deletion series of approximately 100-200 base pairs difference in length at each consecutive time point. Sequence fragments were reassembled into a redundant contiguous sequence using the INHERIT

-77-

software from Applied Biosystems, Inc. (Foster City, CA). In this way, the complete insert from these four cDNA clones was sequenced on both strands to an average redundancy between three and four (each base was sequenced between three and four times, on average). Those complete insert sequences are disclosed herein as SEQ ID 2418, 2419, 2420, and 2421, corresponding to original ESTs with SEQ ID 223, 189, 227, and 188, respectively.

#### EXAMPLE 14

10

15

20

25

30 '

35

5

# <u>Determining Reading Frame, Orientation, Coding Regions:</u> ESTs and Complete cDNA Sequences

Once the complete cDNA sequence has been determined in accordance with Example 13, the reading frame, orientation, and coding regions are determined by computer techniques. (The complete coding region is considered to be the largest open reading frame from a methionine to a stop codon.)

Specifically, the CRM program on the GRAIL server is used as explained in Example 9 to determine probable coding regions. This information is supplemented by location of start and stop codons. Where possible, the results of the CRM analysis are validated by comparison of the cDNA sequence to known sequences using database matching, in accordance with Examples 3 and 4. If a match of 50% (or even less) is found in any particular reading frame and orientation, this serves to verify corresponding CRM results. Alternatively, database matches can be used to determine reading frame and orientation without use of the CRM program. Of course, if the cDNA is derived from a directional library, the probable orientation is already known.

#### EXAMPLE 15

### Preparation of PCR Primers and Amplification of DNA

The EST sequences and the corresponding cDNA sequences and genomic sequences may be used, in accordance with the

WO 93/16178

-78-

PCT/US93/01294

present invention, to prepare PCR primers for a variety of The PCR primers are preferably at least 15 applications. bases, and more preferably at least 18 bases in length. procedure of Example 5 is repeated using the desired EST, or using the corresponding cDNA or genomic DNA sequence from It is preferred that the primer pairs have Example 13. approximately the same G/C ratio, so that melting temperatures are approximately the same. When screening cDNA, introns are of no concern; however, when screening genomic DNA, primers should be selected to avoid reading across introns, which usually are too large to amplify. The PCR primers and amplified DNA of this Example find use in the Examples that follow.

15

10

5

#### EXAMPLE 16

## Forensic Matching by DNA Sequencing

20 In one exemplary method, DNA samples are isolated from forensic specimens of, for example, hair, semen, blood or skin cells by conventional methods. A panel of PCR primers derived from a number of the sequences of Example 1, 2, 11, 12 and/or 13 is then utilized in accordance with Example 12 25 to obtain DNA of approximately 100-200 bases in length from the forensic specimen. Corresponding sequences are obtained from a suspect. Each of these identification DNAs is then sequenced, and a simple database comparison determines the differences, if any, between the sequences from the suspect 30 and those from the sample. Statistically significant differences between the suspect's DNA sequences and those from the sample conclusively prove a lack of identity. lack of identity can be proven, for example, with only one Identity, on the other hand, sequence. should demonstrated with a large number of sequences, all matching. 35 Preferably, a minimum of 50 statistically identical sequences

-79-

of 100 bases in length are used to prove identity between the suspect and the sample.

#### EXAMPLE 17

5

10

15

#### Positive Identification by DNA Sequencing

The technique outlined in the previous example may also be used on a larger scale to provide a unique fingerprinttype identification of any individual. In this technique. primers are prepared from a large number of sequences from Examples 1, 2, 11, 12 and/or 13. Preferably, 20 to 50 different primers are used. These primers are used to obtain a corresponding number of PCR-generated DNA segments from the individual in question in accordance with Example 15. Each of these DNA segments is sequenced, using the methods set forth in Example 1. The database of sequences generated through this procedure uniquely identifies the individual from whom the sequences were obtained. The same panel of primers may then be used at any later time to absolutely correlate tissue or other biological specimen with that individual.

EXAMPLE 18

25

30

35

20

#### Southern Blot Forensic Identification

The procedure of Example 17 is repeated to obtain a panel of from 10 to 2000 amplified sequences from an individual and a specimen. This PCR-generated DNA is then digested with one or a combination of, preferably, four base specific restriction enzymes. Such enzymes are commercially available and known to those of skill in the art. After digestion, the resultant gene fragments are size separated in multiple duplicate wells on an agarose gel and transferred to nitrocellulose using Southern blotting techniques well known to those with skill in the art. For a review of Southern

--

-80-

blotting see Davis et al. (<u>Basic Methods in Molecular</u> <u>Biology</u>, 1986, Elsevier Press. pp 62-65).

A panel of ESTs or complete cDNA sequences from Examples 1, 2, and/or 13, or fragments thereof of at least 15 bases. are radioactively or colorimetrically labeled using endlabeled oligonucleotides derived from the ESTs. translated sequences or the like using methods known in the art and hybridized to the Southern blot using techniques known in the art (Davis et al., <a href="supra">supra</a>). Preferably, at least 5 to 10 of these labeled probes are used, and more preferably at least about 20 or 30 are used to provide a unique pattern. The resultant bands appearing from the hybridization of a large sample of ESTs will be a unique identifier. Since the restriction enzyme cleavage will be different for every individual, the band pattern on the Southern blot will also be unique. Increasing the number of EST probes will provide statistically higher level of confidence identification since there will be an increased number of sets of bands used for identification.

20

25

30

35

5

10

15

#### EXAMPLE 19

#### Dot Blot Identification Procedure

Another technique for identifying individuals using the sequences disclosed herein utilizes a dot blot hybridization technique.

Genomic DNA is isolated from nuclei of subject to be identified. Oligonucleotide probes of approximately 30 bp in length were synthesized that correspond to sequences from the ESTs. The probes are used to hybridize to the genomic DNA through conditions known to those in the art. The oligonucleotides are end labelled with  $P^{32}$  using polynucleotide kinase (Pharmacia). Dot Blots are created by spotting about 50 ng cDNA of at least 10, preferably at least 50 sequences corresponding to a variety of the Sequence ID

-81-

NOs provided in Table 7 onto nitrocellulose or the like using a vacuum dot blot manifold (BioRad, Richmond California). The nitrocellulose filter containing the EST clone sequences is baked or UV linked to the filter, prehybridized and hybridized with labeled probe using techniques known in the art (Davis et al. supra). The 32P labeled DNA fragments are sequentially hybridized with successively stringent conditions to detect minimal differences between the 30 bp sequence and the DNA. Tetramethylammonium chloride is useful for identifying clones containing small numbers of nucleotide mismatches (Wood et al., Proc. Natl. Acad. Sci. 82(6):1585-1588 (1985) which is hereby incorporated by A unique pattern of dots distinguishes one reference. individual from another individuals.

15

10

5

#### EXAMPLE 20

#### Alternative "Fingerprint" Identification Technique

20

EST sequences and the corresponding complete cDNA sequences can be used to create a unique fingerprint for an individual. Thus pools of EST sequences can be used in forensics, paternity suits or the like to differentiate one individual from another.

25

30

35

Entire EST sequences can be used; similarly oligonucleotides can be prepared from EST sequences. In this example, 20-mer oligonucleotides are prepared from 200 EST sequences using commercially available oligonucleotide services such as Oligos Etc., Wilsonville, OR. Patient cell samples are processed for DNA using techniques well known to those with skill in the art. The nucleic acid is digested with restriction enzymes EcoRI and XbaI. Following digestion, samples are applied to wells for electrophoresis. The procedure, as known in the art, may be modified to accommodate polyacrylamide electrophoresis, however in this example, samples containing 5 ug of DNA are loaded into wells

5

10

15

20

25

30

35

and separated on 0.8% agarose gels. The gels are transferred using Southern blotting techniques onto nitrocellulose.

10 ng of each of the oligos are pooled and end-labeled with  $P^{32}$ . The nitrocellulose is prehybridized with blocking solution and hybridized with the labeled probes. Following hybridization and washing, the nitrocellulose filter is exposed to X-Omat AR X-ray film. The resulting hybridization pattern will be unique for each individual.

It is additionally contemplated within this example that the representative number of EST sequences can be varied for additional accuracy or clarity.

#### EXAMPLE 21

### Identification of genes associated with hereditary diseases

This example illustrates an approach useful for the association of EST sequences with particular phenotypic characteristics. In this example, a particular EST is used as a test probe to associate that EST with a particular phenotypic characteristic.

An EST clone corresponding to EST01643, (SEQ ID NO 1894) maps to a gene rich region of chromosome 6. EST clone HHCMH89, from which EST01643 was derived, was mapped to chromosome 6p21 by Dr. Julie Korenberg of UCLA/Cedar Sinai Hospital using FISH. A search of Mendelian Inheritance in Man (supra) revealed 6p21 to be a very gene rich region containing several known genes and several diseases for which genes have not been identified. The cDNA encoded by EST clone HHCMH89 thus becomes an immediate candidate for each of these genetic diseases.

Cells from patients with these diseases are isolated and expanded in culture. PCR primers from the EST sequences are used to screen genomic DNA and RNA or cDNA from the patients. ESTs that are not amplified in the patients can be positively associated with a particular disease by further analysis.

-83-

#### EXAMPLE 22

# Identification of a gene associated with Angelman's disease

5

10

15

20

25

30

35

Angelman's disease (AD) is characterized by deletions on the long arm of chromosome 15 (15q11q13) (Williams et al. Am. J. Med. Genet. 32:339-345 (1989) hereby incorporated by reference). The symptoms of the disease developmental delay, seizures, inappropriate laughter and ataxic movements. These symptoms suggest that the disorder is a neurologic deficiency. This prophetic example illustrates how ESTs, preferably obtained from a cDNA library from human brain, may be used in identifying the defective gene or genes associated with Angelman's Disease. example is based on analogous work with genomic DNA, rather than cDNA and ESTs, in identifying the genetic defect associated with Angelman's Disease.) This example also illustrates how EST sequences may generally be used for identifying gene sequences associated with an inherited disease that is mapped to a chromosome location.

ESTs are screened using techniques described in Example 5 and Example 7 to identify those ESTs that localize to the long arm of chromosome 15 and preferably localize chromosome 15 bands 15q11q13 from normal patients. ESTs that bind to the long arm of chromosome 15 are hybridized to chromosome 15 from AD patients. These studies are preferrably performed using either fluorescence in situ hybridization or using somatic cell hybrids that contain fragments from the long arm of chromosome 15 from AD patients. Those chromosome 15-specific ESTs that do not map to chromosome 15 from AD patients are useful as markers for Angelman's Disease and can be incorporated into diagnostics These ESTs are associated with for genetic screening. chromosome deletions present in Angelman's Identification of the gene associated with these AD negative ESTs and an analysis of the polypeptides encoded by the genes

-84-

from normal patients is essential for providing gene or other therapies for AD patients.

5

10

15

20

25

30

35

Genetic diseases are not always accompanied by gene Therefore, it is also important to use the ESTs that bind to bands 15q11q13 from AD patients as tools to identify the polymorphisms present within the disease population. Restriction fragment length polymorphism (RFLP) analysis can be performed on patient cells from AD disease or from somatic cell hybrids created using the long arm of chromosome 15. For a review of RFLP techniques see Donis-Keller et al. (Cell 51:319-337 (1987) hereby incorporated by reference). DNA is isolated from the somatic cell lines or from cells from AD patients. The DNA is digested with one or more restriction enzymes according to techniques of Donis-Keller et al. The resulting fragments are separated by gel electrophoresis, denatured, transferred to nitrocellulose and hybridized with the selected radio-labeled ESTs that localize to the region of interest. The autoradiographic pattern is compared both to a number of AD patients and to normal patients. Common patterns of EST hybridization in AD patients that are not present in normal patients indicates that the genes associated with these ESTs are candidate genes affected by AD.

cDNA libraries are prepared from the somatic cell hybrids from AD patients. Libraries are prepared using Lambda Zap II Library Kits (Stratagene, La Jolla, California) or other commercially available library kits. The ESTs of interest are used as probes to identify those bacterial colonies carrying genes corresponding to the EST probes. Positive clones are sequenced and the sequences are compared to homologous gene sequences derived from normal patients.

Alterations, including deletions and substitutions, within gene sequences, associated with bands 15q11q13, are thus positively identified and associated with AD disease. Wagstaff et al. were able to identify deletions and substitutions in sequences encoding the GABAA receptor

-85-

protein subunit from patients with Angelman's disease (Am. J. Hum. Genet. 49:330-337, (1991)). It is likely that other genes will additionally be associated with the disease.

5 EXAMPLE 23

10

15

20

25

. 30

35

#### Preparation and Use of Antisense Oligonucleotides

Antisense RNA molecules are known to be useful for regulating translation within the cell. Antisense RNA molecules can be produced from EST sequences or from the corresponding gene sequences. These antisense molecules can be used as diagnostic probes to determine whether or not a particular gene is expressed in a cell. Similarly, the antisense molecules can be used as a therapeutic to regulate gene expression once the EST is associated with a particular disease (see Example 22).

The antisense molecules are obtained from a nucleotide sequence by reversing the orientation of the coding region with regard to the promoter. Thus, the antisense RNA is complementary to the corresponding mRNA. For a review of antisense design see Green et al., Ann. Rev. Biochem. 55:569-597 (1986), which is hereby incorporated by reference. The antisense sequences can contain modified sugar phosphate backbones to increase stability and make them less sensitive to RNase activity. Examples of the modifications are described by Rossi et al., Pharmacol. Ther. 50(2):245-254, (1991).

Antisense molecules are introduced into cells that express the gene corresponding to the EST of interest in culture. In a preferred application of this invention, the polypeptide encoded by the gene is first identified, so that the effectiveness of antisense inhibition on translation can be monitored using techniques that include but are not limited to antibody-mediated tests such as RIAs and ELISA, functional assays, or radiolabelling. The antisense molecule is introduced into the cells by diffusion or by transfection

-86-

procedures known in the art. The molecules are introduced onto cell samples at a number of different concentrations preferably between 1x10<sup>-10</sup>M to 1x10<sup>-4</sup>M. Once the minimum concentration that can adequately control translation is identified, the optimized dose is translated into a dosage suitable for use in vivo. For example, an inhibiting concentration in culture of 1x10<sup>-7</sup> translates into a dose of approximately 0.6 mq/kq bodyweight. Levels oligonucleotide approaching 100 mg/kg bodyweight or higher may be possible after testing the toxicity of oligonucleotide in laboratory animals.

The antisense can be introduced into the body as a bare or naked oligonucleotide, oligonucleotide encapsulated in lipid, oligonucleotide sequence encapsidated by viral protein, or as oligonucleotide contained in an expression vector such as those described in Example 25. The antisense oligonucleotide is preferably introduced into the vertebrate by injection. It is additionally contemplated that cells from the vertebrate are removed, treated with the antisense oligonucleotide, and reintroduced into the vertebrate. It is further contemplated that the antisense oligonucleotide sequence is incorporated into a ribozyme sequence to enable the antisense to bind and cleave its target. For technical applications of ribozyme and antisense oligonucleotides see Rossi et al.

#### EXAMPLE 24

#### Preparation and use of Triple Helix Probes

30

35

25

5

10

15

20

Triple helix oligonucleotides are used to inhibit transcription from a genome. They are particularly useful for studying alterations in cell activity as it is associated with a particular gene. The EST sequences or complete sequences of the present invention or, more preferably, a portion of those sequences, can be used to inhibit gene

----

5

10

15

20

25

30

35

expression in individuals having diseases associated with a particular gene. Similarly, a portion of the EST or corresponding gene sequence can be used to study the effect of inhibiting transcription of a particular gene within a Traditionally, homopurine sequences were considered the most useful. However, homopyrimidine sequences can also inhibit gene expression. Thus, both types of sequences from either the EST or from the gene corresponding to the EST are contemplated within the scope of this invention. Homopyrimidine oligonucleotides bind to the major groove at homopurine: homopyrimidine sequences. As an example, 10-mer to 20-mer homopyrimidine sequences from the ESTs can be used to inhibit expression from homopurine sequences. SEQ ID NOs such as 282, 888, 719, 670, 994, 240, 873 and 761 contain homopyrimidine 15-mers. Moreover the natural (beta) anomers of the oligonucleotide units can be replaced with alpha anomers to render the oligonucleotide more resistant to nucleases. Further, an intercalating agent such as ethidium bromide, or the like, can be attached to the 3' end of the alpha oligonucleotide to stabilize the triple helix. information on the generation of oligonucleotides suitable for triple helix formation see Griffin et al. (Science 245:967-971 (1989), which is hereby incorporated by this reference).

The oligonucleotides prepared may be oligonucleotide synthesizer or they may be purchased commercially from company specializing in а oligonucleotide synthesis. The sequences are introduced into cells in culture using techniques known in the art that include but limited calcium phosphate are not to DEAE-Dextran, electroporation, liposomeprecipitation, mediated transfection or native uptake. Treated cells are monitored for altered cell function. These cell functions are predicted based upon the homologies of the gene, corresponding to the EST from which the oligonucleotide was derived, with known genes sequences that have been associated

-88-

with a particular function. The cell functions can also be predicted based on the presence of abnormal physiologies within cells derived from individuals with a particular inherited disease, particularly when the EST is associated with the disease using techniques described in Example 22.

#### EXAMPLE 25

## Gene expression from DNA Sequences Corresponding to ESTs

10

15

20

25

30

35

5

A gene sequence of the present invention coding for all or part of a human gene product is introduced into an expression vector using conventional technology. (Techniques to transfer cloned sequences into expression vectors that direct protein translation in mammalian, yeast, insect or bacterial expression systems are well known in the art.) Commercially available vectors and expression systems are available from a variety of suppliers including Stratagene (La Jolla, California), Promega (Madison, Wisconsin), and Invitrogen (San Diego, California). If desired, to enhance expression and facilitate proper protein folding, the codon context and codon pairing of the sequence may be optimized for the particular expression organism, as explained by Hatfield, et al., U.S. Patent No. 5,082,767, incorporated herein by this reference.

The following is provided as one exemplary method to generate polypeptide from cloned cDNA sequences. The cDNA from the EST of interest is sequenced to identify the methionine initiation codon for the gene and the poly A sequence. If the cDNA lacks a poly A sequence, this sequence can be added to the construct by, for example, splicing out the Poly A sequence from pSG5 (Stratagene) using BglI and SalI restriction endonuclease enzymes and incorporating it into the mammalian expression vector pXT1 (Stratagene). pXT1 contains the LTRs and a portion of the gag gene from Moloney Murine Leukemia Virus. The position of the LTRs in the construct allow efficient stable transfection. The vector

-89-

includes the Herpes Simplex Thymidine Kinase promoter and the selectable neomycin gene. The cDNA is obtained by PCR from bacterial oligonucleotide vector using primers complementary to the cDNA and containing restriction endonuclease sequences for Pst I incorporated into the 5'primer and BglII at the 5' end of the corresponding cDNA 3' primer, taking care to ensure that the cDNA is positioned inframe with the poly A sequence. The purified fragment obtained from the resulting PCR reaction is digested with PstI, blunt ended with an exonuclease, digested with Bgl II, purified and ligated to pXT1, now containing a poly A sequence and digested BglII.

10

15

20

25

30

35

The ligated product is transfected into mouse NIH 3T3 cells using Lipofectin (Life Technologies, Inc., Grand Island, New York) under conditions outlined in the product specification. Positive transfectants are selected after growing the transfected cells in 600ug/ml G418 (Sigma, St. Louis, Missouri). The protein is preferrably released into the supernatant. However if the protein has membrane binding domains, the protein may additionally be retained within the cell or expression may be restricted to the cell surface.

Since it may be necessary to purify and locate the transfected product, synthetic 15-mer peptides synthesized from the predicted cDNA sequence are injected into mice to generate antibody to the polypeptide encoded by the cDNA.

If antibody production is not possible, the cDNA sequence is additionally incorporated into eukaryotic expression vectors and expressed as a chimeric with, for example,  $\beta$ -globin. Antibody to  $\beta$ -globin is used to purify the chimeric. Corresponding protease cleavage sites engineered between the  $\beta$ -globin gene and the cDNA are then used to separate the two polypeptide fragments from one another after translation. One useful expression vector for generating  $\beta$ -globin chimerics is pSG5 (Stratagene). This vector encodes rabbit  $\beta$ -globin. Intron II of the rabbit  $\beta$ -globin gene facilitates splicing of the expressed transcript,

-90-

and the polyadenylation signal incorporated into increases the construct level of expression. These techniques as described are well known to those skilled in the art of molecular biology. Standard methods are published in methods texts such as Davis et al. and many of the methods are available from the technical assistance representatives from Stratagene, Life Technologies, Inc., or Promega. Polypeptide may additionally be produced from either construct using in vitro translation systems such as In vitro Express<sup>TM</sup> Translation Kit (Stratagene).

## Example 26

## Production of an Antibody to a Human Protein

15

20

25

30

35

10

5

Substantially pure protein or polypeptide is isolated from the transfected or transformed cells as described in Example 25. Concentration of protein in the final preparation is adjusted, for example, by concentration on an Amicon filter device, to the level of a few micrograms/ml. Monoclonal or polyclonal antibody to the protein can then be prepared as follows:

# A. Monoclonal Antibody Production by Hybridoma Fusion

Monoclonal antibody to epitopes of any of the peptides identified and isolated as described can be prepared from murine hybridomas according to the classical method of Kohler, G. and Milstein, C., Nature 256:495 (1975) or derivative methods thereof. Briefly, a mouse is repetitively inoculated with a few micrograms of the selected protein over a period of a few weeks. The mouse is then sacrificed, and the antibody producing cells of the spleen isolated. The spleen cells are fused by means of polyethylene glycol with mouse myeloma cells, and the excess unfused cells destroyed by growth of the system on selective media comprising aminopterin (HAT media). The successfully fused cells are diluted and aliquots of the dilution placed in wells of a

microtiter plate where growth of the culture is continued. Antibody-producing clones are identified by detection of antibody in the supernatant fluid of the wells by immunoassay procedures, such as Elisa, as originally described by Engvall, E., Meth. Enzymol. 70:419 (1980), and derivative methods thereof. Selected positive clones can be expanded and their monoclonal antibody product harvested for use. Detailed procedures for monoclonal antibody production are described in Davis, L. et al. Basic Methods in Molecular Biology Elsevier, New York. Section 21-2.

### B. Polyclonal Antibody Production by Immunization

5

10

15

20

25

30

35

Polyclonal antiserum containing antibodies to heterogenous epitopes of a single protein can be prepared by immunizing suitable animals with the expressed protein described above, which can be unmodified or modified to enhance immunogenicity. Effective polyclonal antibody production is affected by many factors related both to the antigen and the host species. For example, small molecules tend to be less immunogenic than other and may require the use of carriers and adjuvant. Also, host animals vary in response to site of inoculations and dose, with both inadequate or excessive doses of antigen resulting in low titer antisera. Small doses (ng level) of antigen administered at multiple intradermal sites appears to be most reliable. An effective immunization protocol for rabbits can be found in Vaitukaitis, J. et al. J. Clin. Endocrinol. Metab. 33:988-991 (1971).

Booster injections can be given at regular intervals, and antiserum harvested when antibody titer thereof, as determined semi-quantitatively, for example, by double immunodiffusion in agar against known concentrations of the antigen, begins to fall. See, for example, Ouchterlony, O. et al., Chap. 19 in: Handbook of Experimental Immunology D. Wier (ed) Blackwell (1973). Plateau concentration of antibody is usually in the range of 0.1 to 0.2 mg/ml of serum (about 12  $\mu$ M). Affinity of the antisera for the antigen is

WO 93/16178

5

10

15

20

25

30

35

determined by preparing competitive binding curves, as described, for example, by Fisher, D., Chap. 42 in: Manual of Clinical Immunology, 2d Ed. (Rose and Friedman, eds.) Amer. Soc. For Microbiol., Washington, D.C. (1980).

Antibody preparations prepared according to either protocol are useful in quantitative immunoassays which determine concentrations of antigen-bearing substances in biological samples; they are also used semi-quantitatively or qualitatively to identify the presence of antigen in a biological sample.

#### EXAMPLE 27

# Identification of Tissue Types or Cell Species by Means of Labeled Tissue Specific Antibodies

Identification of specific tissues is accomplished by the visualization of tissue specific antigens by means of antibody preparations according to Example 26 which are conjugated, directly or indirectly to a detectable marker. Selected labeled antibody species bind to their specific antigen binding partner in tissue sections, cell suspensions,

or in extracts of soluble proteins from a tissue sample to provide a pattern for qualitative or semi-qualitative interpretation.

Antisera for these procedures must have a potency exceeding that of the native preparation, and for that reason, antibodies are concentrated to a mg/ml level by isolation of the gamma globulin fraction, for example, by chromatography ion-exchange or by ammonium fractionation. Also, to provide the most specific antisera, unwanted antibodies, for example to common proteins, must be removed from the gamma globulin fraction, for example by means of insoluble immunoabsorbents, before the antibodies labeled with the marker. Either monoclonal heterologous antisera is suitable for either procedure.

-93-

## A. Immunohistochemical Techniques

5

10

15

20

25

30

35

Purified, high-titer antibodies, prepared as described above, are conjugated to a detectable marker, as described, for example, by Fudenberg, H., Chap. 26 in: Basic & Clinical Immunology, 3rd Ed. Lange, Los Altos, California (1980) or Rose, N. et al., Chap. 12 in: Methods in Immunodiagnosis, 2d Ed. John Wiley & Sons, New York (1980).

A fluorescent marker, either fluorescein or rhodamine, is preferred, but antibodies can also be labeled with an enzyme that supports a color producing reaction with a substrate, such as horseradish peroxidase. Markers can be added to tissue-bound antibody in a second step, as described below. Alternatively, the specific antitissue antibodies can be labeled with ferritin or other electron dense particles, and localization of the ferritin coupled antigen-antibody complexes achieved by means of an electron microscope. In yet another approach, the antibodies are radiolabeled, with, for example 125I, and detected by overlaying the antibody treated preparation with photographic emulsion.

Preparations to carry out the procedures can comprise monoclonal or polyclonal antibodies to a single gene copy or protein, identified as specific to a tissue type, for example, brain tissue, or antibody preparations to several antigenically distinct tissue specific antigens can be used in panels, independently or in mixtures, as required.

Tissue sections and cell suspensions are prepared for immunohistochemical examination according to common histological techniques. Multiple cryostat sections (about 4  $\mu$ m, unfixed) of the unknown tissue and known control, are mounted and each slide covered with different dilutions of the antibody preparation. Sections of known and unknown tissues should also be treated with preparations to provide a positive control, a negative control, for example, pre-immune sera, and a control for non-specific staining, for example, buffer.

Treated sections are incubated in a humid chamber for 30 min at room temperature, rinsed, then washed in buffer for 30-45 min. Excess fluid is blotted away, and the marker developed.

5

10

15

20

25

30

35

If the tissue specific antibody was not labeled in the first incubation, it can be labeled at this time in a second antibody-antibody reaction, for example, by adding fluorescein- or enzyme-conjugated antibody against the immunoglobulin class of the antiserum-producing species, for example, fluorescein labeled antibody to mouse IgG. Such labeled sera are commercially available.

The antigen found in the tissues by the above procedure can be quantified by measuring the intensity of color or fluorescence on the tissue section, and calibrating that signal using appropriate standards.

## B. Identification of Tissue Specific Soluble Proteins

The visualization of tissue specific proteins and identification of unknown tissues from that procedure is carried out using the labeled antibody reagents and detection strategy as described for immunohistochemistry; however the sample is prepared according to an electrophoretic technique to distribute the proteins extracted from the tissue in an orderly array on the basis of molecular weight for detection.

A tissue sample is homogenized using a Virtis apparatus; cell suspensions are disrupted by Dounce homogenization or osmotic lysis, using detergents in either case as required to disrupt cell membranes, as is the practice in the art. Insoluble cell components such as nuclei, microsomes, and membrane fragments are removed by ultracentrifugation, and the soluble protein-containing fraction concentrated if necessary and reserved for analysis.

A sample of the soluble protein solution is resolved into individual protein species by conventional SDS polyacrylamide electrophoresis as described, for example, by Davis, L. et al., Section 19-2 in: Basic Methods in Molecular Biology (P. Leder, ed), Elsevier, New York (1986), using a

-95-

range of amounts of polyacrylamide in a set of gels to resolve the entire molecular weight range of proteins to be detected in the sample. A size marker is run in parallel for purposes of estimating molecular weights of the constituent proteins. Sample size for analysis is a convenient volume of from 5-50  $\mu$ l, and containing from about 1 to 100  $\mu$ g protein. An aliquot of each of the resolved proteins is transferred by blotting to a nitrocellulose filter paper, a process that maintains the pattern of resolution. Multiple copies are prepared. The procedure, known as Western Blot Analysis; is well described in Davis, L. et al., (above) Section 19-3. One set of nitrocellulose blots is stained with Coomassie Blue dye to visualize the entire set of proteins for comparison with the antibody bound proteins. The remaining nitrocellulose filters are then incubated with a solution of one or more specific antisera to tissue specific proteins prepared as described in Example 26. In this procedure, as in procedure A above, appropriate positive and negative sample and reagent controls are run.

5

10

15

20

25

30

35

In either procedure A or B, a detectable label can be attached to the primary tissue antigen-primary antibody complex according to various strategies and permutations thereof. In a straightforward approach, the primary specific antibody can be labeled; alternatively, the unlabeled complex can be bound by a labeled secondary anti-IgG antibody. In other approaches, either the primary or secondary antibody is conjugated to a biotin molecule, which can, in a subsequent step, bind an avidin conjugated marker. According to yet another strategy, enzyme labeled or radioactive protein A, which has the property of binding to any IgG, is bound in a final step to either the primary or secondary antibody.

The visualization of tissue specific antigen binding at levels above those seen in control tissues to one or more tissue specific antibodies, prepared from the gene sequences identified from EST sequences, can identify tissues of unknown origin, for example, forensic samples, or

WO 93/16178

differentiated tumor tissue that has metastasized to foreign bodily sites.

The entire contents of all references cited above are hereby incorporated by reference.

While the present invention has been described in some detail for purposes of clarity and understanding, one skilled in the art will appreciate that various changes in form and detail can be made without departing from the true scope of the invention.

10

15

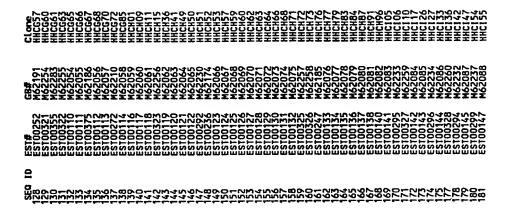
5

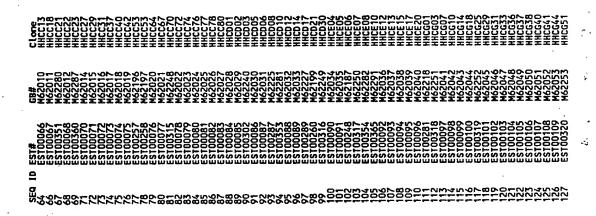
## VII. Correlation of EST and Clone Identifiers

The EST sequences of the present invention are identified herein by SEQ ID NO, and are identified in the GenBank database by a different number, are identified in the inventors' lab (and upcoming publications) by EST number, and clones have been submitted to the American Type Culture Collection (Rockville, Maryland USA) under clone names. Table 12 cross references those different numbers for the ESTs from cDNA, SEQ ID NOS 1-2409.

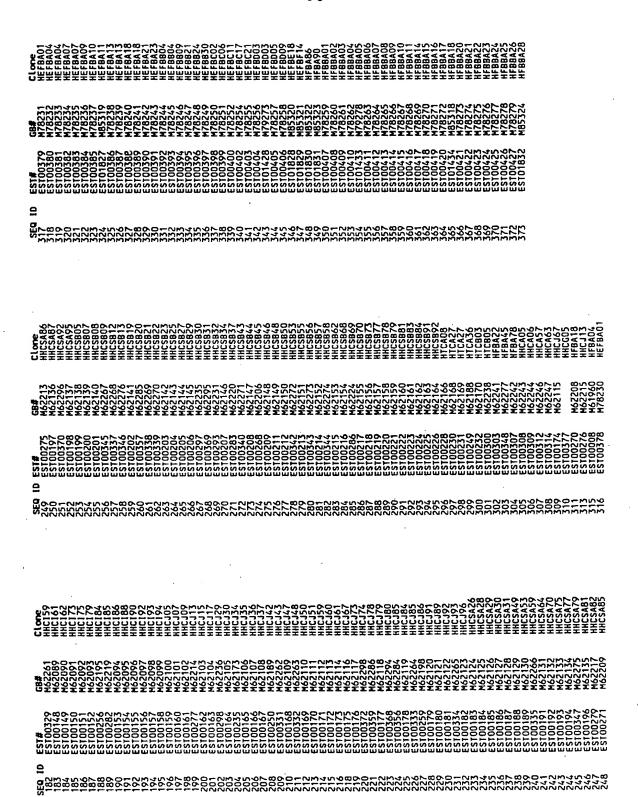
20

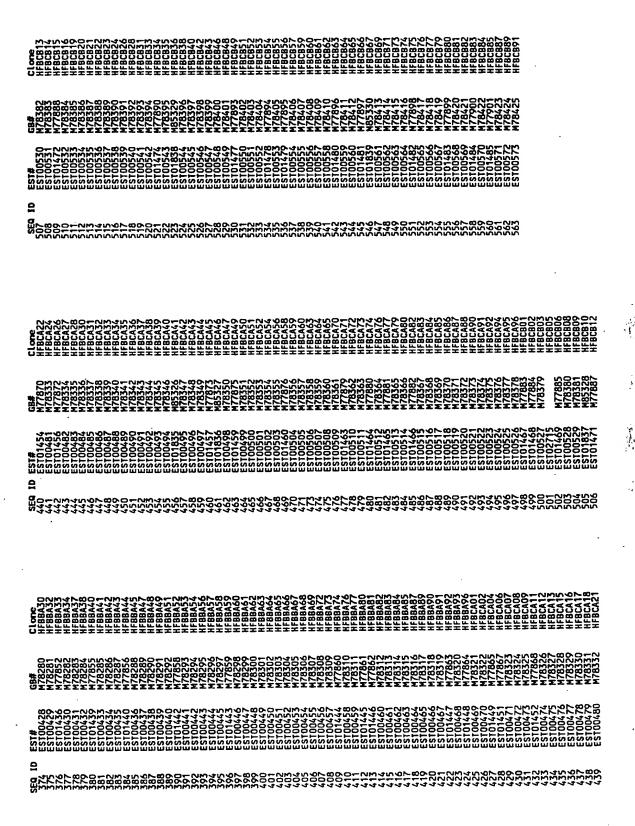
Certain Sequence ID NOS are excluded from some claims based on their homology to known non-human sequences (See Table 2).

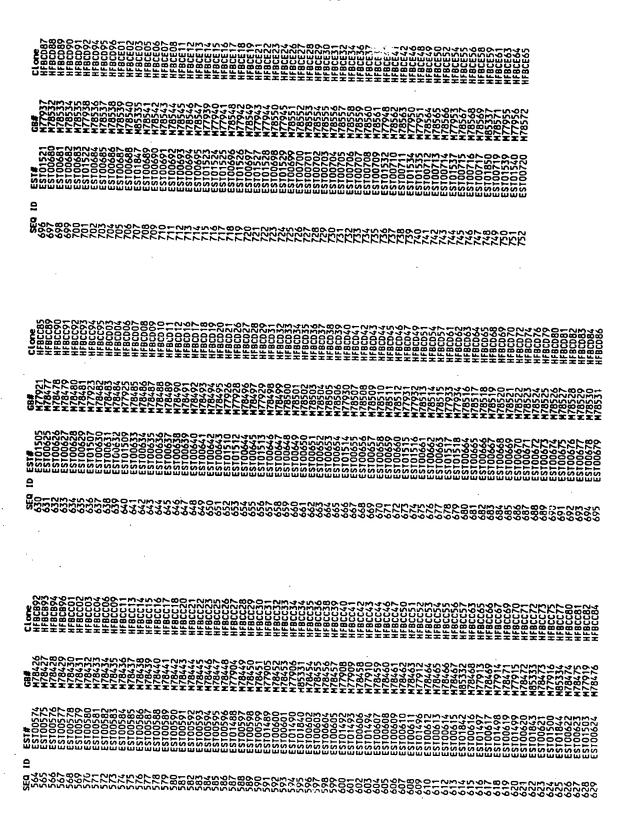


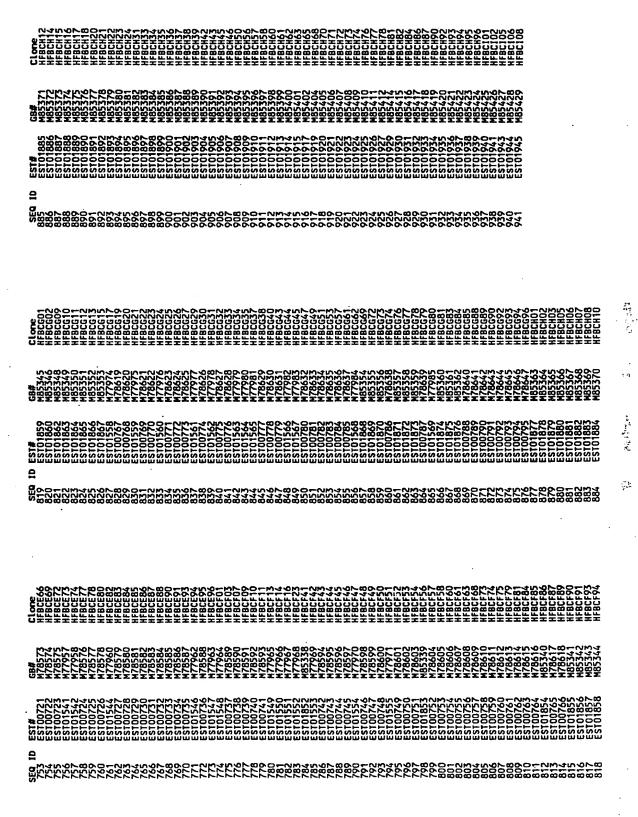


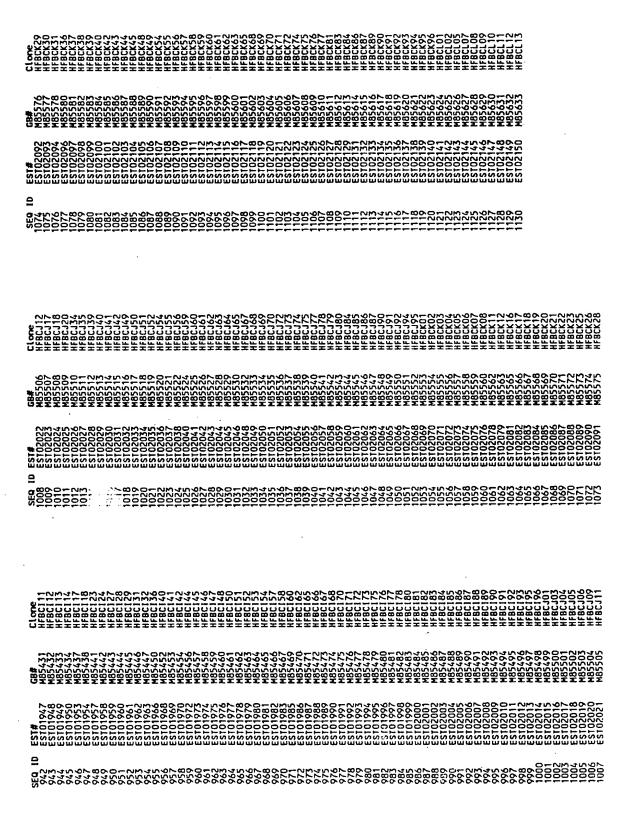


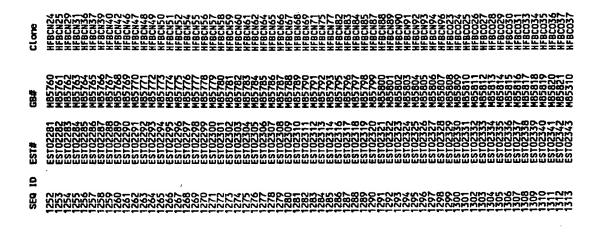


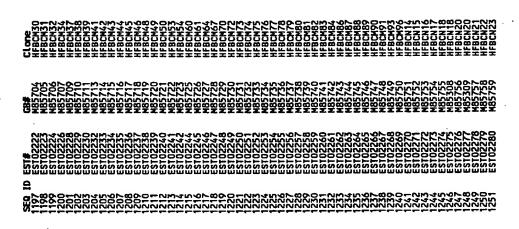


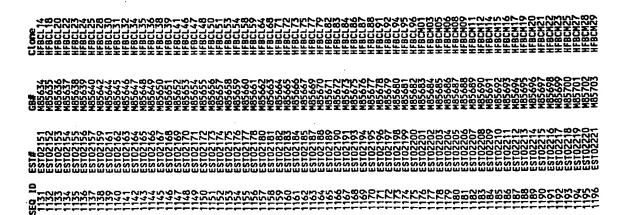


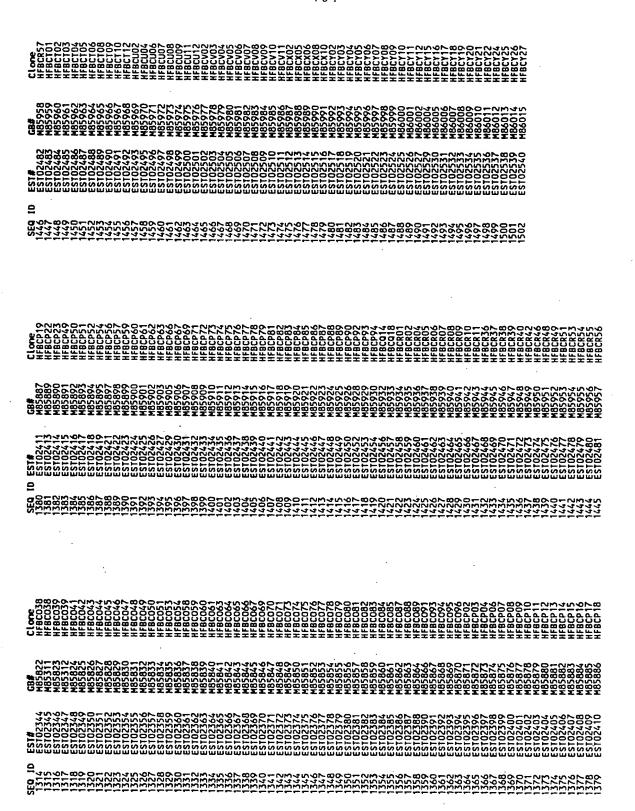


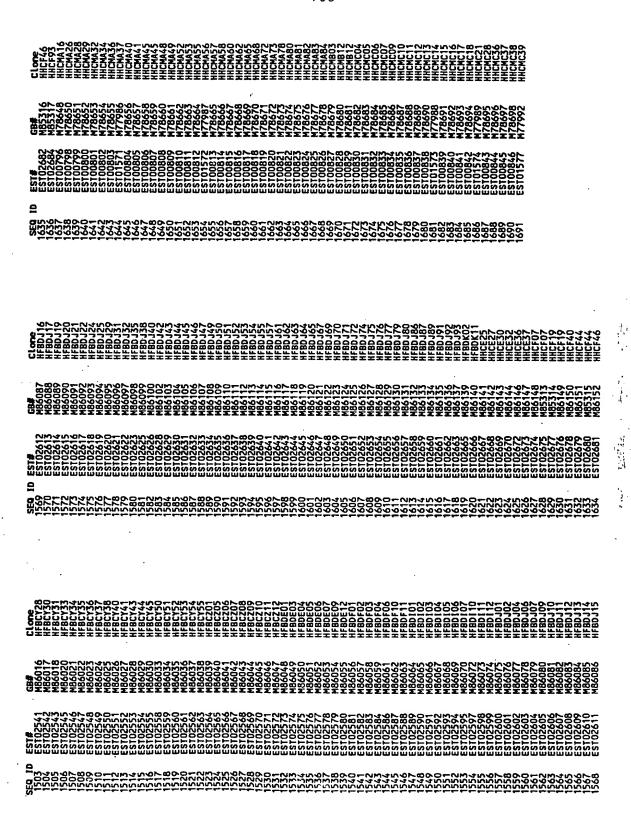


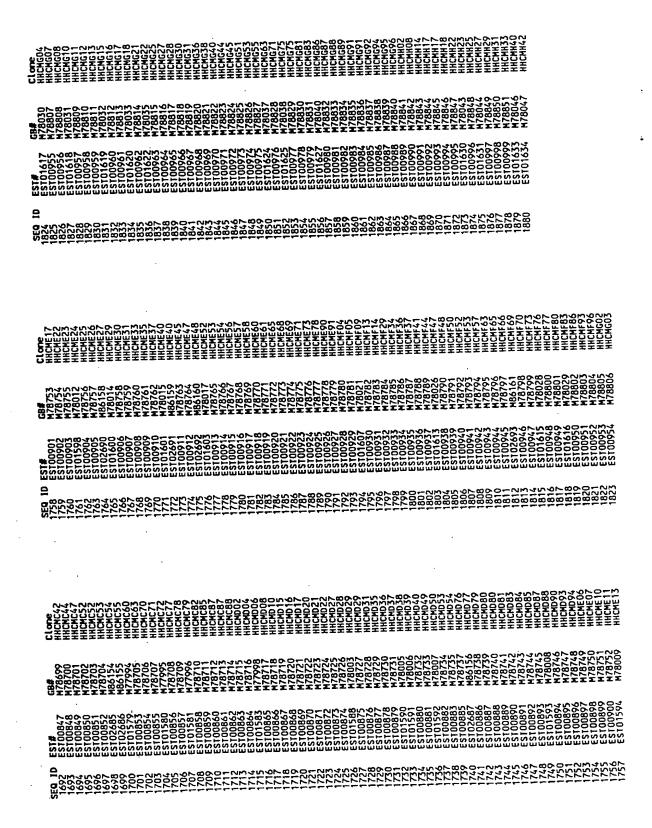


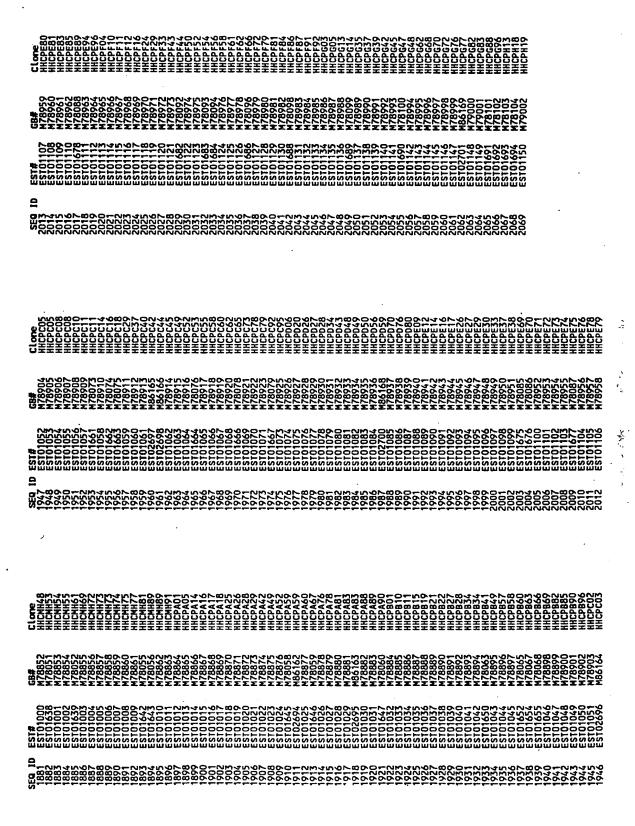


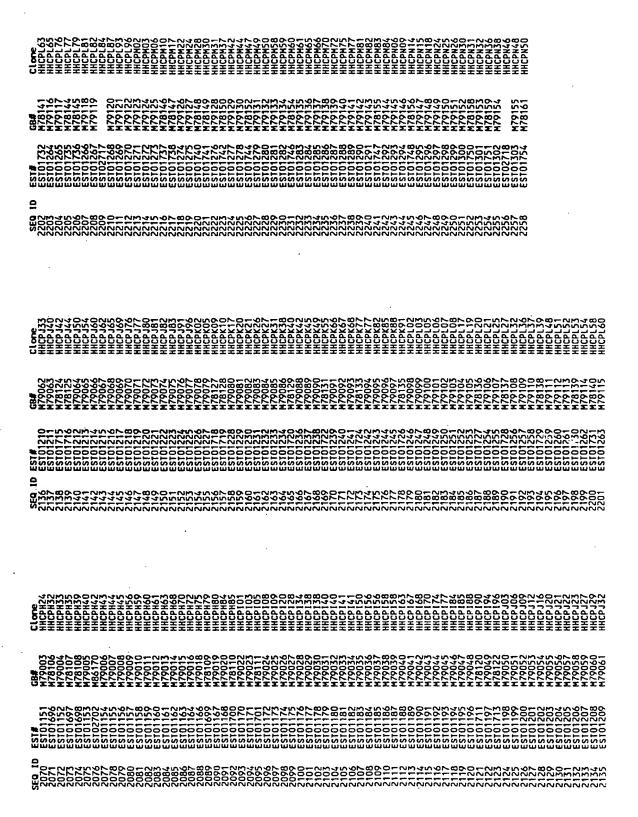


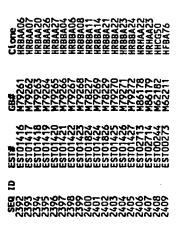














WO 93/16178 PCT/US93/01294

-110-

NOTE REGARDING SEQUENCE LISTINGS: The listings of SEQ ID NOS: 1-2421 are in numerical order. However, an occasional number (for example, SEQ ID NO: 44) is not found in this list. In all, 9 SEQ ID NOS are not used. Nevertheless, the convention "1-2421" is used, for example, to refer to all the SEQ ID NOS in the following list, while "1-315" is used, for example, to refer to all the listed sequences falling between SEQ ID NO 1 and SEQ ID NO 315.

5

#### SEQUENCE LISTING

- (1) GENERAL INFORMATION:
  - (i) APPLICANT: Venter, J. Craig

Adams, Mark D.

Moreno, Ruben F.

- (ii) TITLE OF INVENTION: Sequences Characteristic of Human Gene Transcription Product
- (iii) NUMBER OF SEQUENCES: 2412 (1-2421, with 9 SEQ ID NOS unused.)
  - (iv) CORRESPONDENCE ADDRESS:
    - (A) ADDRESSEE: Knobbe, Martens, Olson, and Bear
    - (B) STREET: 620 Newport Center Dr. Sixteenth Floor
    - (C) CITY: Newport Beach
    - (D) STATE: CA
    - (E) COUNTRY: USA
    - (F) ZIP: 92660
  - (v) COMPUTER READABLE FORM:
    - (A) MEDIUM TYPE: Floppy disk
    - (B) COMPUTER: IBM PC compatible
    - (C) OPERATING SYSTEM: PC-DOS/MS-DOS
    - (D) SOFTWARE: PatentIn Release #1.0, Version #1.25
  - (vi) CURRENT APPLICATION DATA:
    - (A) APPLICATION NUMBER: 07/837,195
    - (B) FILING DATE: 12-FEB-1992
- (vii) PRIOR APPLICATION DATA:
  - (A) APPLICATION NUMBER: US 07/716,831
  - (B) FILING DATE: 20-JUN-1991
- (viii) ATTORNEY/AGENT INFORMATION:
  - (A) NAME: Israelsen, Ned A.
  - (B) REGISTRATION NUMBER: 29,655
  - (C) REFERENCE/DOCKET NUMBER: NIH004.004CP1
  - (ix) TELECOMMUNICATION INFORMATION:
    - (A) TELEPHONE: 619-235-8550
    - (B) TELEFAX: 619-235-0176

SEQ ID NO:1: (Length of Sequence = 362 Nucleotides)

CTTCCCTTTT GITCCCCTCA GTGTCCCTTT TAATTGCTTC CCTCCATTTT CCTTAGCAGC ATCCTAGTTG ATGGTCTGGG
TTATCAGAGG AGCAAAAACA TTTAAGTGTC AAATAATGCT CATTGTCTCC CTGGGATTTC TAAACAGAAA AAATGAAGAA

AGAGGCAGAG AAGAGCTTCA CAAGGTGTGT GCCAGCTCTG CATCATTTCC AGCTGCTCAA CCACCATTTC TCCCATTTTA
GGTCCCCAAA AGTAGGAGGT GGGGCCTCAC AGAGCTGCTG TGGGCTTTGG GTATCAAAAG CTGCAGCCAC CATATGGGGC
ACTCCTGGCT GGTGTACAGG GTGGGCATTG CCCAGGTCTT TT

# SEO ID NO:2: (Length of Sequence = 214 Nucleotides)

GITTINCITT TITCITAGCT TCATTICTCT TAAAAAACAA GGAACAAGAA AACATIGCAC CAGCGITCTA AGCCTCAAAC
AAAANACAAA ACAAATCCCC CIGCGAAGAA CAATAAACIT TACATCICIT TGGCAACAAT AACITAAAAT CACCCAACIT
CCATTCGCIC CAACCACAGC AGITAGITAG TITACAAAAAT ATTCCNIGIG CIGC

## SEQ ID NO:3: (Length of Sequence = 344 Nucleotides)

ATTAATAGGA AAGATGATTG TATAGATGGT GGGCTATTAA CTCAGATCAG GATGAGAATC GGGAGTGCCT TTACATGTGT GGTACCCAAA TGGGTGGTTG GATATAAGAG TAACAAAAGG ACTGAAAGGG TTAAAAAAGA AAGAAAAAAA AAAAACTCCC TGGTTGGGAG GGTGTTAAGT ATCGAGTGT TTTCCAAACC ATTCCTCCTC TGCTCACCTA CCCCTAGGTG ATTAAAGGAG ATAACTTTTA AAAAAGAAAG AATTGGCTCA AAGGTACTGT AAATTCTAGG ATTATATACC TTTATATAGG TTCATTCCCT GATCCCTGTA TTATCAAGGC ACAG

# SEO ID NO:4: (Length of Sequence = 352 Nucleotides)

GACCCGGTAA CCGAGGCGGC AAGGAGGCCA GGTAGTCCCG GCACCTCTCA CTCTGCAGAG ACCAGCGGCT TCGTGGGAGG CCTGTGGGTC ACACGTAGGG GCTAGAGCCA GCCTGCATCC TGCCCACCGG GCTCCACTTG GAGATCAGCA GGAGGGCCAG TGTGGGACCC CTGCTGCCAC CTCTCCTGGG CCTGTKTCCT TTCTGGAAAT TAAGAAGGTG TGCTCCAGAG CCAAGAGGAG CAATAAGAAA CCTCGTGTGC CAGCTTCTTA AGGGTKGCAG TGCAAGACCC CA

# SEO ID NO:5: (Length of Sequence = 562 Nucleotides)

ATACCCITAC ATATATATC ACAGAAAATC ATATTGCATA TACTCITTCI CCACATCATA AAAATGGGIG TIGGGCICIC TAGGACACAA GGGAAGCAGG CCAAAATTCI CATATTTTCA GGAATAAACI GAGIGCCCCG AAGGIGIAAT AGGAACCITT TACTAACCIC ATCTGACTIC ATCCTCACAC CAGCATTTTG TGTGTAAGGA AACTGGCCGA GAGIGGITAA GAAATATATC CAAAGACGIA TAGTTCCAAA TGGAACACGG ATCTTTTTAT TTAAATTCCA ATCATCITIC CATTATATCA GCCAATGATG GAGCAGAAAG CTGGTCCAGG CAATCCCAGA ATAGATCTTT CTAGGCCACC GTTCAGTGIG AGGAGGGGA AGTGGCCTTG CCCAAGGGCC AGTGAGCTCA ATTAGGGTTA ACGCTGCTTC TTAGCCTACC CCAGGGGCACA CCGCACTTAG GTTGTTTTGT GCCCAGCTTTT GGCAGGGAAGC ATTCCTCCTT TCAAAGATTN NAGCCTTGCG GTCATATATC GGGTGTAATA GGGTTCTTTTTTT

# SEO ID NO:6: (Length of Sequence = 359 Nucleotides)

ACATGITCIC CCTCTITCAA TITTAGCAGI AATGIGATCC TCAAAAATGC ATTAATACTA GITGAAGTAA ATAAACGGAA GAGCTCCAAA ATGCCTGCAT TAAATGCAIT TITCCACACCT AATGCCAATC ATCCCAAAGCT ATTITCAACA AGTCAGGTAT TCAAAGCTAT TCACACCACT TGAAAGAGTA ATTACCATTI ACTGAAGCAC TTATCTGTCC TACACTGATG GGAGTAAATG CTTCTCATAG GITATCTCAT GTACATTATG CCACTITNAC TTAAAATGAT CACAATTNAG TGCTATAGGT TITTGGGTTA ATGTTTCCC NGGGGGAGTT GTTAAAAACA TGGCATTTC

SEQ ID NO:7: (Length of Sequence = 218 Nucleotides)

AACITGCAAC ATAAATACTA GAAAAAGAGA AAATATCATC AAAATACAAA TAACTGTTAG AAATCATTGC TCAAAAGAAR AACCTGGCAA TGCATGATTA CGAAAATGCAA AAGAMGATAC AGITGCTCTC TGTATATGGG CTTTCCACAT CCACAGATTC AAACAACTGT GGATAAAAAA GGATTTTTCA ATGCCATTAA ACAVCAATGC AACAGTAA

SEO ID NO:8: (Length of Sequence = 345 Nucleotides)

CTACAATAGA AGGCAAACTA TGTCCCTCCT TTGCTCAGAA ACTITTAATA TCTKCCTATT TCCCCATGTA AAAGCCAATC
CTCAACCACA GIGTAGAAGG GCTATCCATT TCTAGCTACA CATCTCCTCA GICACTGCCC CCAGCCCCAG TACTTGGGGA
CTTTGCCCTT GCAGTTCCCT GIGCCAGCAA ACTCTTCCTC CAGATGTCCA CATGACTCAC CCNNCTCCTT CAGGGGTCTT
CTCAAAATGTC ACTTTACCAG AGGIGGCTTC CCTGACCATC CTGTATAAAT AGCATCACCC TACCTCCTAT CTCTCTCTCT
AATGTCTCAG GAATTCGATA TCAAG

SEO ID NO:9: (Length of Sequence = 189 Nucleotides)

GTGAACAGAC TAAGGCCITT NTGGAGGCCC AGAATAAGAT TACTGTGCCA TITCTTGAGC AGTGTCCCAT CAGAGGTTTA
TACAAAGAGA GAATGACTGA ACTATATGAT TATCCCANGI ATAGTTGCCA CITCAAGAAA GGAGAACGGT GTTTTTATTT
TTACAATACA GGNITTNAGA ACCACCGGG

SEQ ID NO:10: (Length of Sequence = 267 Nucleotides)

CTCCCTTCGC CACCIGCTGG ACGCGAGGG CTACTACGAT GCCATGGGIG TCCTGRTTTT TIATTICTCA GACAGGACTG CTCTGTATNT GTCTTTGGAT TCTACGTAGA TTTATATTTG TAAAATATTA CATTTGTCAT GACCAGAAGA AATGTCATTA TCGTAAAATT TAGATTCTGG NGTCTATATA TCNAAGNAAT ACTAACTACT AACTGTTATA ACAWCAAAAT GTGGGNIGTA TATCTACARG CCNGAGCCGA CTTGTCA

SEQ ID NO:11: (Length of Sequence = 247 Nucleotides)

CTCATAAAGC CAGGGTGATA AAAWIGGTAG TITCATGTTA TCTACAAGRC TAAGKTCAAA ATTCCATGCA TGTGCTGRTA

AAAGACCCAT NATGGKCCIM ACTGTACTTA CTCCCCATTT ATTAGCATTC ATTCTGGTCA CCAGCTCTAG TTCCTCTGCT

TAGCGAATCT CGCTTGTCTT CAAGATGTCA TTCAAATGTC ACATTTTGTG GGAAGCCTTG CCTTTTTTGA CACGGTCTCC

CTGCCAC

SEO ID NO:12: (Length of Sequence = 280 Nucleotides)

AAGGCGAGAG GCTTCTGGAG AAACCCACCC CACCAACGTC TTGATCTTGG ACTTTTAVCC TCCAGAGCTA TGAGAAAACA AVTTTCTGTV VATVGVGGCC ACTCAGGCTG TGGATACTGG CAGCCCTAGC AAACTCATAC ACACATACAT TTTAAACTCG GTTTAATCCT GTGCCATTC ACTTATGGTT CAGTTTTTAA ATAGTCCTAG TCTTATGVCC ACTGTTAAAG TTCACCAGGA CATAGGSCAT TGGGGAAAGG GGCCTGTAAC TCTTGGATTA

SEO ID NO:13: (Length of Sequence = 339 Nucleotides)

VCIVICIVOC AACITCATIC AGATATTGAC TCTGGTGATG GGAACATTAA ATACATTCTC TCAGGGGAAG GAGCTGGAAC CATTTTTVIR ATTGATGACA AATCAGGGAA CATTCATGCC ACCAAGACGT TGGATCGAGA AGAGAGAGCC CAGTACACGT TGATGGCTCA GGGGTGGAC AGGGACACCA ATCGGCCCACT GGAGCCACCG TCGGAATTCA TTKTCAAGGK CCAGGACATT AATGACAGTC CTCCGGAGGT TTCCTGCACG AGACCTATCA TGCCAACTGT GCCSTGTARA GGTCCAATKT TGGGTGSTGT ACGGTAGTGG GGAGGCCTG

SEQ ID NO:14: (Length of Sequence = 342 Nucleotides)

GOGVICAAAG TAGCAGATTC TAGTAAAGGA CCAGATGAGG CAAAAATTAA GGCACTCTTG GAAAGAACAG GCTACACACT
TGATGTGACC ACTGGACAGA GGAAGTATGG AGGACCACCT CCAGATTCCG TITATYCAGG TCAGCAGCCT TCTGTTGGCA
CTGAGATATT TGTGGGAAAG ATCCCAAGAG ATCTATTTTG AGGATGAACT TGTTCCATTA TTTGAGAAAG CTTGGACCTA
TATGGGATCC TTCGTCTAAT GATGGATCCA CTCACTGGTC TCAATAGAGG TTAATGCGTT TGTCACTTTT TTGTACAAAA
GGAGCARGCT CAAGGAGGGC TG

# SEO ID NO:15: (Length of Sequence = 354 Nucleotides)

ATGITGATGC TGAAATTVAA GATCCACCAA TTCCAGAAAA ACCATGGAAG GITCATGTGA AATGGATTIT GGACACTGAT
ATTITCAATG AATGGATGAA TGAGGAGGAT TATRAGGTGG ATGAAAATAG GAAGCCTGTR AGITTYCGTC AGCGGATTTC
AACCAAGAAT GAAGACCCAG TCAGAAGTCC AGAAAGAAGA GATAGAAAAG CATCASCTAA TGCTCGAAAG AGGAAACATT
CGCCTTCGCC TCCCCCTCCG ACACCAACAG AWTCACGGGA AGAAGAGTGG GAAGAAAGGC CAAGCTAGCC TTTTATGGGG
AAGCCGCAAG AAGTCCAGAA AGAGCGWWGG TTGA

# SEO ID NO:16: (Length of Sequence = 348 Nucleotides)

CAGGCAAGIT TCTTCCAGGA TGAGAAATCA GTGGAAAGTG AGGGCCAGCC AACAGCCACC ACCAACCACC CAACAGCGAA
GCGAGACCAT CTTAAAAGAG CCCCAGCCAA GCTGACCATG GGTCTGACCC CAAACTGAAG AAATGCCCAG CCCAGCCAAA
CCCCAAATTGC TAACTTGTAT TATAAGCAAG TACAATGGTC CTTACCTTAA GCCACTAAGT TTTGGGATGC TTTGTTACAC
AGCTATAGAT AAGCTGATAC AGGGAATGTC AGAWTCCATG ATGAGAGACC GAGCCTTTCA KTCTGTCAGA GGYACCTTVG
GTTGGCAAAA CTTCAAAAAG AGGGACCT

## SEO ID NO:17: (Length of Sequence = 415 Nucleotides)

ACCAYGGGCT GGGGGGCCGG GAGITAGGGC TGGGGCTTGT TTTACGCTCT GCCCCCACA CCCCCTCCTC TTCCGTCCTG
ATTAAGCCCA AGGGTTGGTG GACTTAACTT TCAGCCCATC TCTAAGGGTT TCACAGACTG GATCTTTCTA AACTTTATTG
GGTACCTGCT TCCCCTTTTC CCTGGTAGTT TTCATCTACA AAAAGTCAAA ACCTGATCGA AATAGAAATA AGATCATCAA
ATTGGACCAT TCTCTTAGCG TTCGAGTGTG CCGGCCAGAC TGGCATTCAG TACACGCTGA GATCCAAACA CATCACACTG
GCCTCAGGTC ACCAACTCGC CACTCAGGGC ACAAGGCCTG CCCTTGTGGT CACAAGGCTT TCCTTAATGT CGTCGGTGCC
CAGGTGAACC ACAAG

## SEO ID NO:18: (Length of Sequence = 356 Nucleotides)

GIATGIATGI CIGIAGGIAI TICIATACIT AACCATCIGI GICCCAATIA AGCIAAACAI GATICATICI GATGCCAACC
CCCATCCATC AIGCCATGGA TCGCTCTAGA CTTCTTCCCT TGTAACCICC CACTCAAACA GIGAGAAACC TITGCCCAGT
AIGITITIGGA GIAACCICAC TGGGAGTITG CAGTCCCACT AGATGAATGC CAACCCATIT GITCATITAA AAGGACITIT
GGAACCATAG AGCAATGGCT GGGCTGGGTC TVGCACGITC ATCITGACTG AAACAATTGG CCATGAAGGC ACTTGCCAAG
GAAACTCTAG GGGCCACAAG GGTCCTGGGT GCTTGC

### SEO ID NO:19: (Length of Sequence = 339 Nucleotides)

CATGCTTCCA TITTTTTTAG TITTAAACCA CCAAACCAAT ATTTTYCCTT TAAATTTTAA TCTTATAATA TAGAAATCTT
ATGTAAATGA AATTTTGTCA TGTTTCAAAT AAAGAGAACT GAAGTAGAAA ATAGAAATGC CAGTAAACAA CATAATGTTT
AAATTTACAAC TTACATTAGG GGTTTGGGGG VATGCTAATT ATATATTGAG AATATACATT AGAACTCTTC AAAATGGGCT
CTTCTAATGA GGTCACTACT GAACATAATT GTTCCCTCTT CTGTTAAATA GAATAGGTTT AAATGACTAG TCCAAATGGA
ATTATTGCCT TCTKGTTAA

SEO ID NO:20: (Length of Sequence = 437 Nucleotides)

AGAACAAGGG AACTCAGCAG CCCCTCCCTT CCCATCAGCT GITCCTGAGA GATGCAATAT AGTAGTCATC GACATCATCC
TTATCAACAG CATCATCACT CAGACAGTGG TGAAAGTCTT TCTTCACAAG GAAAAACAAA GATAAAGAAA TACATGAGCA
TTAATCAGAA ATTITCAAAG CITGGATTCT AATGATATGC ATTATCATTA GACATTCAAA TGCTATACAT CTTCTGATGA
AGCCTCCTTG ACAGCAGCTA CACTTATTTC ACATTAGAAT GCCTAGAGAA ATCCTGACTG CCCAGCTTGG TCATGGGACC
TTCCCCACTC TCCTCTTGGA GGAATGAAAA GATGTGGCGG CTTTCTACTT TTGCTACTGA GCTGGGGTAT ATGGCTAGGT
CCACTTTCTA AGGGGCTTGG AAGGGTTATT CCATCTG

SEO ID NO:21: (Length of Sequence = 385 Nucleotides)

GITTGATTTG CITTTTTTT AGAGITTTAC ATCAGIGITT TTCAGGAATA TTGGICITC ATTITCTTT CITGGAATAT
TTTCTAGITT TACITTGICA GAGIAAATTC TGGCITCACA GAATTATTTG TAGICICICC TGICITGGIT TATTCATGCT
GCTATAACAA AATACCACAG ACAAGGIGGT AATAAATAAC ACAAATTTAT TITTCCCAGT TCTGGAGGCT AGGAGITCAA
GAAGCTGGCA AGITCAATGT CTGGIGAGAC CCATTCCTTC ATAGGTGGCA CCATCTAGGG GTCCTTACAT GRCAAAGAGA
TGGAAGGGCC AAAAAGATGG TGACCTATTG TGAGGCCTTT TTTAAAGGGC CTTVAAATCC CAGTC

SEO ID NO:22: (Length of Sequence = 374 Nucleotides)

ACCITCATGG TCATGAAGGC CATGCAGTCT CTCAAGTCCC GAGGCTACGT GAAGGAACAG TTTGCCTGGA GACATTTCTA
CTGGTACCTT ACCAATGAGG GTATCCAGTA TCTCCGTGAT TACCTTCATC TGCCCCCGGA GATTGTGCCT GCCACCCTAC
GCCGTAGCCG TCCAGAGACT GGCAGGCCTC GGCCTAAAGG TCTGGGACGG TGAGCGACCT GCCAGGACTCA CAAGAGGGGA
AGCTGACAAG AGATACCTAC AAGACGGGAG TRCCTGTGCC ACCTGGTGCC GACAAGAAAG CCGAGGCTTG GGTCTGGGTC
AGCAACCGAA TTCCAGTTTA GAGGCGGATT TVGGTCGTKG ACGGTGTCAG CCAC

SEO ID NO:23: (Length of Sequence = 322 Nucleotides)

CAAAACGIGA TCACCACAGC TCCGITCCIG CAGIGACACT TAACATACTC AGCATCITCA TGAATTCIGA ATAATTTACT
GATCGIAAAG TCIAAAAGIA TCAATITCAG GIGAGCAGIT TIAAATCAGA AAATAGICAA TAGITAATCA TGACTCITCA
GGGIATITCC TTCACGICCT CIGAAGAGIT TCCCAGAACA TTCTTGIGAA AAGGAATGCC TCCCAACAAT GGAGAGCAAC
AATAGCAACA GGCATCIGAA TCAGCCTGGC CTCTGAAAAC AGACCANAGA GGAGITTATC TGITTCITCC AGIGGAGGAA
GG

SEO ID NO:24: (Length of Sequence = 113 Nucleotides)

CCTGAAATCG GAGTCTTTTG GACTGACTCC AAATTCAATG GGTGGCACAG GCAGCACGGA GTCCACGTGA ATCTCCACCC CGTTAACAGG CGGGACGACA GCCCCTTGCA GCC

SEQ ID NO:25: (Length of Sequence = 399 Nucleotides)

GGAAAGAATG AAGGAAAAAC AAGACAAAAT CTACTTCATG GCTGGGTCCA GCAGAAAAGA GCAGACGCTG GCCTCAGACA
CAGACAGCAG TCTTGATGCC TCGACGGGAC CCCTTGAAGG CTGTCGATGA TAGGTTAGAA ATAGCAAACC TGTCAGCATT
GAAGGAACTC TCACCTCCGT GGGCCTGAAA TGCTTGGGAG TTGATGGAAC CAAATAGAAA AACTCCATGT TCTGCATGTA
AGAAACACAA TGCCTTGCCC TACTCAGACC TGATAGGATT GCCTGCTTAG ATGATAAAAT GAGGCAGAAT ATGTCTTGAA
GAAAAAANTT GCAAGCCACA CTTCTNGAGA TTTTGTTCAA GATCCATTTC AGGGTGAGCA GTTAGAGTAG GTTGAATTT

SEO ID NO:26: (Length of Sequence = 355 Nucleotides)

GATTGGIATA CGGCCAACAA TGGATTGATA GCCTTAATAT AGAAATAGTT CCAGCAGGCC AGATGCAGTG GCTCAATTCT
GTAAACCCAG TGCTCTGCAC AGCTAGGAAG GAAGATCACT TGGGCCCAGG AGTTCAAGGC TCCAGTGAGC CATGATCACG
CCACTKCCTC CAGCCTGGGT GACAGAGTNA GGCCCTGTCT CTAAAAAATG AAATAGCTCC ATCAAGTCAA TAATTAAAAG
TTCAACAGCC CAACAGANCA AAAATTGTAA ATGANCACAA ATTAGAAAAT GTACAAATTA AATATTAATG ACCCATAACC
CTATAAAGGA AAGTTTAACC TCTCTAGTAT TTTTT

# SEO ID NO:27: (Length of Sequence = 322 Nucleotides)

AAAACGTGAT CACCACAGCT CCGTTCCTGC AGTGACACTT AACATACTCA GCATCTTCAT GAATTCTGAA TAATTTACTG
ATCGTAAAAGT CTAAAAAGTAT CAATTTCAGG TGAGCAGTTT TAAATCAGAA AATAGTCAAT AGTTAATCAT GACTCTTCAG
GGTATTTCCT TCACGTCCTC TGAAGAGTTT CCCAGAACAT TCTTGTGAAA AGGAATGCCT CCCAACAATG GAGGAGCAAC
AATAGCAACA GGCATCTGAA TCAGCCTGGG CTCTGAAAAC AGACCAAAGA GGNGTTTTC TGCTTTCTTC CAGTGAGGAA
GG

# SEO ID NO:28: (Length of Sequence = 287 Nucleotides)

TATTITTATT AAAGGACCAC CCTGGCTGIM GTGAGATGAA TGGATTCAAA CAGGGCAAGA GTGGATACAG MGAGATAAGT TAGGAAGCTG GTATAGAAAT CTGGATGAGA TATGGTGGCT TGGATGATAC TAGCAGTGAG TATGGGAAGT AGGTGGATTA CTTTACACTT TTTTAGATCA GTCKATTCTT GATGTCTTGA AGACAAATTA ATCTCATATA TAACTCTAAA CAACATATTT ATATTTCATG TAAATAAGGA TAATGCTGAC CAAATATTAG CACCTTT

# SEQ ID NO:29: (Length of Sequence = 282 Nucleotides)

CAGGCAGGG AAGCCIGGAA GCAAAGGAGG ACCIGGCICC TGACICICAG AGAGGATAGG CIGGGATCCC TGGGCAGGC CIGITCCITG GCIGGCCAAT ITAGICITIC AATTGICTAA GGGCICCCA TIGCCIGCCC TIGCCICTIT CTAGCCIGIT ATTICIAGGC TCCICGGAAT AAATCICAGG TITCCTACIG TCATGCCITT AGITCAAAAA TGAGAATCIG CCCIACAGIG CIGGCCICCI TCCGGCCIGA AAGCCAGCAC CITKCGACCC GG

## SEO ID NO:30: (Length of Sequence = 345 Nucleotides)

GAAGCTGGTG AATACATTTC AAGACACAAC ATGGCACCTG TGTCTAGCTC TATGGTACAA CATGGTACTA TGACACATAT

AATGGGTTGC CAGATGGGGA AGGCAGCTTC TCTGCAACTG AGCTGAGATC TCAAAAATAGA CAATGTCAAG ATGGAATGAG

AAGGGAAAAA CAGCATGTGT AGACAGAGTAG TGACAAAAGG CTAATTAAGG ACTGAAAGAA ACCAGTGGCC AACAAGGGAA

TCTACGGGTG ATAAAGATAA GACGGTGAGA GAGATAAGGC TAGATTGTAT AAGGCTTGAC AGACCATAGC AAGATAAGCA

AGGACCTGTG TCCTGTTAAC CATTT

## SEO ID NO:31: (Length of Sequence = 343 Nucleotides)

ATAAAATTGG TCTGGGTACC CTAAGGTGTT TGCKTTGATA GAAAATTGAC ACCCCAAACT AAGTGTTCTA CTTAGCTTCT ACAAAAATGA TCCTAGACC TTAGATTAGT CATTACATTT TTATTTAAGG TACTATGTTA CTTTCATGAC TACAAAATGA GGCACTCGTA CAAAACAGGA ATGAAAACAT ACATATACTG TCTTGTCTTT ATGTCGTATT AATGCCAAAG ATATTGTCAG GGATTATTTT AAAGAAGCCC TTACTCATGA TGGCTATTT TAAAAATGGC ACAGGACAGT AACAGGCTGA AAAGAAACAC CTGGTTTGAG GGGCCAAATT AAG

SEO ID NO:32: (Length of Sequence = 153 Nucleotides)

ACAGGATGGT CAGGACAAGC CACCTCTGGT AAAGTGACAT TTGAGANGAC CCCTGAAGGN GGGGGGTTGA GTCATGTGGA CATCTTGAGG AAGAGTTTAC TGGCACAGGG AACTGCAAGG KCAAAGTCCC CAAGTACTAG GGCTGGGGGC AGT

SEQ ID NO:33: (Length of Sequence = 257 Nucleotides)

TCAGICAGCI TATCGCAGGI GCAGCCAAAC ACAAAGCIIC AGGACAAATI GTACAAACTI TACAATGIGG GAITTAAATI
TAAAATATGA TACATAAAAA TCTACACAAA ACIGATAAAA ATCAAGCACA GNTACCAGGA TTGAAACTTA TAATAATCCA
TGIGIGAAAG GGAGICTIGI TICCTITCAA GIGCTITIAT TCTGCTATGG AACAGICAAA ATGGAAGNIG TAAAGCTITG
TGGITAGITT AAATTAT

SEQ ID NO:34: (Length of Sequence = 307 Nucleotides)

CTCCCACCCA TATCTAATCC AACAAGTCCA GCTGCCTCTC TCTNAAMAAT ACCNARGATC AGGCCCCTTC TCAGCACCCC
CACAGCTGCT GCCCCAAAGG AAGCCACGTC ATCTCTCACG GAGATTGTKC AGCAGCCACT GCCTCCTTGT CACCTTCGCC
TGTGGTCATT CTCCCCACAT GGCCAGGGAA TGCGTCCTGT TAAAGTCTGC TAGGTCACGG TCCTTCCTAC TCAAAATGCT
CCCYTGGCTC CCACTGCCCC CAGAGTAAAA AGCCCAGACC TTCAAATGAC ACAAAGGCCT ACAACGA

SEO ID NO:35: (Length of Sequence = 266 Nucleotides)

TCCACAGGIC ATCAGATRCC TGCINGATAA TATATAAACA GTAAAAACAA CITTCACITC TTCCTATTNT AATCGIGIGC
CATGGATCIG ATCIGIACCA TGACCCIACA TAAGGCIGGA TGGACCICAG GCIGAGGGCC CAATGIATGI KIGGCIGIGG
GIGIGGIIGG GAGIIGICT GCKGAGIAAG AACACGNITT TCAAGATICT AAAGCICAAT IMAAGIGGCA CATTAATRAT
AAACTCAGAT CIGNICAAAA GTCCGG

SEO ID NO:36: (Length of Sequence = 388 Nucleotides)

CAGCITIGGA AAGACITIGA CCICIGAACA AAAAGCCAGA AGGCIGCTIA AAGAAATAGI AAGGGITICA CITGCCCIGG
ATAGICACAA ATCIAGGAGI ACIGGITCAC IGCCITGGGI TACCAGGIAT CAGCICTIC ACAATCICIC CICTICCCAT
GCITCCCCIT AAAGICCAGI IGACAAATGA AAAAGAAAAA AAGGCCITGA TITATAGIAT IGCCAAACAA CCICATAAGA
ATGGGIAAAA TIACATACAC ACATACATAG AGAAGGGAGG TAATGCIGIG AATCIACITG AGCIGGATIG CATGCICCCI
AGGGACCACG GIGCCCAACC IGIAATTITA TITCTAACTI TIATAAATAT ACICCITIIT CACGGATG

SEQ ID NO:37: (Length of Sequence = 342 Nucleotides)

GAATGICTAC ACAAGGAAGT ACAGGATTIG GCTTTICTAG ATGICATATC CAAACITCGC AGICATGAGA ACAAAAGTGT
TGCCCAGCAG GCCTCTICA CAGAGCAGAG ACTTACTGIG GAAAGCTGAG AACTGCCCGA TACACGGCAT CATCCCATCT
CTAATTTCCC CTCTGTCCTC CATCCAGCGG CTTCTTCCGC TTCATTCTCT ACCATACCAC TTGTGCATGC ATGIRATGIT
CTAATACCAA TTGAAGAACC GCTGTAGGTA CCTCCCTAAT AAGGATTTCT AAACCTATAG TTAGTGTGAT CATGACTTTG
GTCAAAAGGCA AGTYTCCCAC CC

SEQ ID NO:38: (Length of Sequence = 355 Nucleotides)

GATGACTTGG AGAATGCCGA AGAGGAAGGC CAGGAGAATG TCGAGATCCT CCCCTCTGGG GAGCGACCGC AGCCAACCAG
AAGCGAATCA CCACACCATA CATGACCAAG TACGAGCGAG CCCGCGTGCT GGGCACCCGA GCGCTCCAGA TTGCGATGTG
TGCCCCTGTG ATGGTGGAGC TGGAGGGGGA GACAGATCCT CTGCTCATTG CCATGAAGGA ACTCAAGGCC CGAAAGATCC
CCATCATCAT TCGCCGTTAC CTGCCAGATG GGAGCTATGA AGACTGGGGG GGTKGACGAG CTCATCATCA CCGACTTGAG
CTGGAGTCAT CTTTCCTGMC CTTTGCCCCA TGCCC

SEO ID NO:39: (Length of Sequence = 303 Nucleotides)

GCCAAAAACA NYTCIGAACC CGTTTIGGGA AATAATGGGA TICCTIGATC ACGGGACAAC GAATCACCCT GAAGITTITC
TCCAGITTAC TCAGICACAT AAGCCACCAG AGGCTAACCA CACTGACAAC AAAAGCAAGT CCCAGGATTC CGGGGCTAA
TACCATGCTA GGCATTACTT GGGAAGITAT GAGITGGTAT ACATCIGIGA ATTIGGIGGG AGGAGAAAAC TAACAGTAAA
TTTATCAAAG CCAGIGGTAC GITCAGCGIT ATAAAAATTA CAAGGATCIG CTTCTCGGCG ACT

SEQ ID NO:40: (Length of Sequence = 178 Nucleotides)

GGTGTCGGGG GCTAGAGATA CACATGCCAG TNCIATACAT TTCTCAGCAC TGTGCTGTCG ATTCACAGCA GTTCAATTGT TCATGCGATA TAAGCCAGTC ATGTGGCCCA AGITATTCTG TCGGCTGTGT TCTCTGCAGG AATCTGATGC AAGAAGGCCT GAAGGATGCA TGGCTTTT

SEQ ID NO:41: (Length of Sequence = 322 Nucleotides)

TECCTTICTT TAGAAATTTA GEGCAGIGIG ATGCTTCCAG AGGTCIGTAC AAACACCAGC TITCATIGIG CITGGGAGIT
TCCATGCCTC TYCCITCTCT TCGCTTAGIG CACGTTTCTG CTTTTTATCA GITTGACTGC CTGAGACTGA KTCCAACAAC
CCAAACTGAA CGCTCAGCTC CTCCKTTTCA AAGGAGGATG ACTINICINA ACAACTATTT AGGTGAATTA TTKCKACAGT
TTATTAAAGC AATGGCTCTA AACAAATTCC ACTGGGGGTG ACAAAGTACA ATACAAAAGG CGTACTCTGA GGGCTTGGGG
GT

SEO ID NO:42: (Length of Sequence = 278 Nucleotides)

AAACITIGGC ATTITIATIC AGACACGIAT AAAAACAAA CAAAAAACIT CAGIGATACA ACAGACGIIT ICCCITAGIT CCCCATCCAA GGGGACAGAG GIGIGCAGCI GAAGCIGGAY CITITITCIG TCCTACCIGG AAGCIGICIC ACIGCIGGAT GAGAAIGGCI TCTAAAAGIG GATCITGGGG ATCCITGIGA ATTIGCCCIC GGATAAGGAG TGAAGWICAT TTACGGCACA TGIGGATIAT GGITTACACA AAGATGICCA GITATITIT

SEO ID NO:43: (Length of Sequence = 225 Nucleotides)

AGATCAAAAG ATGAGAGAAG CTGAAACAGA ACCGCATGAG GGAAAGAGGA AAGTGGAATC TCTGTGGCCC ATCITCAGGA TCCACCACCA GAAAACCCGT TACATCITCG CCTCTTTTAC AAGCGGAAAG CCAGCAGCAG GATCTCTAGG AATATTAGTA TTAAAGAAGG CTATGCAGCA TAAACCTGAT TTCAAAATGG TAAAAGCAAG GITATGTGTA CTTGT

SEQ ID NO:45: (Length of Sequence = 305 Nucleotides)

GGATTGCCAG GAGCTGTTCC AGGITGGGGA GAGGCAGAGT GGACTATTTG AAATCCAGCC TCAGGGGTCT CCGCCATTTT
TGGTGAACTG CAAGATGACC TCAGATGGAG GCTGGACAGT AATTCAGAGG CGCCACGATG GCTCAGTGGA CTTCAACCGG
CCCTKGGTAG CCTACAAGGC GGTGGTTTTG GGGGATCCCC ACGGCGAGTT CTGGCTTGGG TCTTGGAGAA AGGKGCATAG
CATCACGGGG GGACCGGAAC AGCCGMCTGG CCGTGCAAMC TGCGGGGACT GGGATGGGCA AACGC

SEO ID NO:46: (Length of Sequence = 264 Nucleotides)

ATGAAATAGC ATATCINNGC CTAATTAAAA GATTCCATTA CATTTACITT TATCATTTAT ACTGCCAAGG ATCAGTCACA
AAAAATTCAA ATTATACATA TIATTCATGC TITAATTTCA TAAATAAGTA AATTAAAGCA AGCCAATATG TCTCTCTTCA
TAACATAGGG AAAAATTACT GITTAGCATA ACAGNGTAAT AGGCAAAGTC TAGCCATACA GCAGCAGTTC ACGGTGTTGT
CAAGTTGGKA CAGGTTCCAT CGAT

<u>SEO ID NO:47:</u> (Length of Sequence = 175 Nucleotides)

GATCICTICC AGCGICAATG TACTGGGACA GCAAACACTC ACATTGGAGA TICCITCIGG CCACCGGCIT CCCAGIACAT TGACGCIGGA AGAGATCATC TCAAATGGIT CTCCAGIGIC AGGCIGGAGA TCTCCAGAAA TGGAGICIAC TCCIGGGGIG GCTIGIATGG GAGCC

# SEO ID NO:48: (Length of Sequence = 270 Nucleotides)

GTCTGTCAGA GCNACCGGGC AGCTCAMRCC CACAGCGGCT CCTCATCCTC TGTGGTGGCA TCCTCATTCC ACTCTCATCT
GCCACCTKCT CAGGCGGGCC TCTAGCTTTC TCATGTACTC TAGCAATTCC TGTTTCTCCT GCTGTAACTG CTCCTTTTCC
TTCTGGAGCA CACGCAGGGC TGACCGCAGC TGTGTCAGCT TCCGCTTACT TIMIGACAAC TGTACCAGGC TAGAATCCTT
TCTGCCTGGG TCAGCTTCAG TCTTTGAACA

### SEO ID NO:49: (Length of Sequence = 359 Nucleotides)

CCCTGAAGAG TGGGTGGGAC AACCAGATGG GTGTAACCCC TTGTGGGGGA AAAGGAGTGA GTTTACTTGG TAAAATAATA
ATGGTAATGT CAGCAGCGTG GCTGGGGGAC TCAGTATGGT CCCGGGAAAA GAGTTGGGGC AGTGAACTTC CCAGGCCGAC
TGGCCTTGGG CTGGCAGCAG GGAGGCTGCA GGGCGCCTAC CTMCTCTGCC ACGTCCCTGC CTAGGAAACC TATCCCAGGA
CACCCTGCTT TGGCCTGGAT AGCAGCCTAG GGATGAGCAT TTCTTTGAAA GCAATTAGGT TATTCACCTG GTATTAAAAC
TATTTACTGT TAAAAAATCT GTGACTTCAT GGARGTGGG

# <u>SEO ID NO:50:</u> (Length of Sequence = 271 Nucleotides)

CCAGGAAGGA CAGGAAGTGT CCTCTAATAC GCATAAGATC CAGTACAGGA GAGATGGGAA GWGAGKCTCC AGGATGAAGG GGAAAARAGG CCGCATGCCA GTCACCTGGC ATCINCCAGA GAGGGYCAGY CTNCCCACTG AGACTGGGGC ACGAGTCCCG TCATCACCAT GCCCTCTGAC TGTCGAACTG TCTTTTTACC TGACAAATAC TACACAGGTA TCGMTCGTGG CCATACTCTG CTATCTAAAC CCAGGAACTG ATTAGATTGT T

# SEO ID NO:51: (Length of Sequence = 226 Nucleotides)

CTCCAAGCAG TAAAGACTIG CAAAGCATTG CATTITGATT AAACCTTGCT GGGCTGAAGG GCAGGCAGAG CTGTGGTGGA CACTGGCAGG ACGCAGCACC CCCCGACTGG CCCTTGGCAG GCTGCACCGG GCGCATGCGG GTGTGGGCCA GGGTTGCTTT AGGAAGCAGG TGGGAGTCTK NCACGTGCAG KCGGTCCAGG AGKGYACCAK GCCTGGCAGG GCACTG

# SEO ID NO:52: (Length of Sequence = 408 Nucleotides)

GGTGGGGCAA GGTGGGGGTG AAGTGCACTC CTGCTGCATG AGTGGCAGGG CAGGGTGCAC ACACACACGT GGGTMCTGGC
TGGGTGAGGC AAGCAAAACC TGCCTGCACA TGGCAAAGGG ATGTGGGAAG TATCCATGGG CNCCAGGGGA AGCTGCAGTT
TGGGGAGGGA ATGGGTGGCA CTGCTGCGTG TCTGTGGGGG CCACCCCACT GGGGGTCTCC AAGTGGTCAA GTTCCGTCTG
CCAGGTTAGA AGCTATGATG GGGGCTTCTA GGACACTNGA GGCTGACCTG AAAGCAAGGT ACTTTTCACA CTGGGACCCT
GCAAGAGGCC AACAAGATTA AGGGATGCTT CAGGTCAGAC TTGGCCCTCT TCTTATGGGG CAAGACCTTC CCCGCAGAGT
TCAGATCT

# SEO ID NO:53: (Length of Sequence = 314 Nucleotides)

TTCTGTGCAG GAGGACCACA TGGCAGTCCA GCAGACTGCA CATTTTTAAA AACTAGGTCT TCCCAGGTAG TTTGAGGAGC ACCAGGGCAC ACTCAGGGAA GGGACATGTC AGTGTCTGAG AGCTCACGGG AGGAAGGTGT AGTGACAACA TGGACCATGG TGGAGTGACT TTAGACGGCT CTTGGGTNAG GAGAATCATC ATGTAACAAA GCATTAAATC ATTTGGAGAA ATTCAGAAAA NTCGTAGATG TACATTCTAG CCCACTTACC AGGCCTACTA AACGTCAATC AGATATATTT CAATTTGAAT TCGG

# SEQ ID NO:54: (Length of Sequence = 310 Nucleotides)

AAGCCACCGC ACCTGGCCCA TTACATTIAT AATGITATAA GGGGGTTGAG GGGTCGTCCA CTGGAGCAGT GGTTCTCAAA CTCGTGTATG CATAGGAATT ACCTGAAGGG CTTGTTAAAA CACAAACTGC AGGGCCCACC CCCAGAGTTT CTGGTTGGGG AGGTGTGGGC TGGGCTTGAG GATGIGAATC TCTCACAAGC TCCCAGGTGA GGCTGCTGGT CTGTGGACCC ACTTCAAAGA CCCAGTGAAT CAGAAGAGTC AGTGAGACTG GACAAATGAA CGCAAGACAG TCTTCAAAGG AGACCAGAGG

# SEQ ID NO:55: (Length of Sequence = 252 Nucleotides)

TTTTTTTTT TYCCGGGGAR GICAAACATA CTTTTCAAC ATAGGATKIC TGACAGGAGG CCCTTGGMCA GGGITCCCTG
ACCICTGYTT CAAACCCCAC TGGAAACAGA GCAAAGTCAT CAMGAAAACC CAGGACACCA GGGCAGGGGG GCTGCACAAG
GTCGGGTAGG TCACAGTGGG CCAGCACACA GTGGCCCCGC CCAGGTCCAG CCCAGCCTGG GGGAGGGTGT GAGGGTTCCA
KGCAAGCTCA TT

### SEQ ID NO:56: (Length of Sequence = 188 Nucleotides)

GICAAGICIA CCATCATICI AGAAGGAAAA GGCATGGIGG GAATICAGCA CCIGAACIIG TATITACACC AGCCICGGCA TCIGGCAAGG RAATAGCGAT TGITCATAGI GATGCAGAGA GAGAACAGGA GGAKGAAGAA CAAATACACA CAAACAACIG ATCIAGGGAG ACICCAARGA TCCAACAG

# SEO ID NO:57: (Length of Sequence = 304 Nucleotides)

AATCAGCCTG CAAGCAAAAG ATAGGAATAT TCACCTACAG TGGGCACCTC CTTGAAGAAG CTGATAGCTT TTACACAGTA
TTAGATTGAA ATAATGGACA GAAACACATT CTTGTCAAGA AAGGGGGGAGA GAAGTCTGTT TGCAAGTTTC AAAGCAAAAA
GCAAAAAGTGA AATGATTGA GGATTTCTGT TCTAATTGGA GATGATTCTC TGGTTGTTAG AAATGGCAAA TATTGATGAT
TGTGTGCCTAT TGATTGGTGC AGGATACTTG GTATACGAGT AAATACTTGA GACTCGTGTC ACTT

## SEO ID NO:58: (Length of Sequence = 261 Nucleotides)

CCAGAAGCTT CTTGCCTTCT CTGTGCTCTC AGTGGTTCCC TTCCCTGAAG TGCCTCCCTT CTCATTAATT ATAGCCTGTG
TCTGAACATT GTGAGCTATA AGAACCCTCA TATTAATGGT TAAGGGACTG TTGGAAATGA TGTGATTTTA TTAAAAATGG
GGTCTTTGTG GAGGAGTCAG GAATGGTCAA AATGAGCTTC AGGTATGGGG CTTGCTCTRT GCTCCTGATA CCAAGGGTCT
GGCAAGCACA AAGGAAGGTG G

# SEO ID NO:59: (Length of Sequence = 470 Nucleotides)

AATACGTATT CIGAAGCCAC TATATCIGCA TATGTATCCC AGATTIGAAC AATTAAGTAA AAAGATGGIG AATGATGAAA
GCCAGTTTIC TGICGGAGA AGTGAGAGGI GACAGATAAC CAAAGGAAGA AGGCTAGAAT GGATAGAGGA CAGTGCTTAA
GIGTAGTICC TGITGCCTTT AGTCTTATAG ACTTCATTIC CAAAGTTTCT TAGCACCCCC CTTCCCCCTT TGGTGAGGTT
GTTTCACATA TTTTCTAGAC AATTAGATTC TTTTGTCAAA GICTGTGITC CATCCGGAGA GCCTCTGATC TCTTAAATGA
TTTTTTAAAT TTACATACAT TAAGGTTCAC TCTGCTGTAA AGGTCTGIGG GTTTTAATCC TGICCCACAG TTTTTGCATA
TGTTGGCCTT CTGCCTGGGA ATACTCTCCC AGATATTCCC CATGACTGGC CCCTTATCTT CAATCAGATC

# SEQ ID NO:60: (Length of Sequence = 466 Nucleotides)

GIGITTCAAG GGAAGGCAAC IMCAAGITIG IGCAGCIGAA ITITCIGIAAA GITAAGACAG ACTCAMCITC ICATTCAATC IGGGGCAGIG GATAACCITT CIGAATAGAC CCACITGIIC ACGGACAGGG ATAGAAGIIT GCCITICITC ITITCCITGAA ITITGGAGIGA GCACIAGGGA GGGGAAGIGC ATGGGIGACA IGAAGAAGGI GAAGAIGIAG IAAAAGCAIC ATCCAGGIAC ACATTAACGG IGCIGCAGAA ITITCACAAT ACAACIGAGG GAGICIGIAG IGGCAAAAAGC AATTACIGAG CACAAAAGCC

AGRICICAAG GGCTGATTCC ACCITCCCTG TCCAGGGACT TTCTCAGCAA ACTITGTTCA TGAGCAGTTG TTCGCTTTGA TGGTCTTAGC CAGTTTTTGG TGCAGGGGTG TTCCTCTGGT ACTAGGGCTA GGGCAGCTGT TTAAAG

SEQ ID NO:61: (Length of Sequence = 491 Nucleotides)

GACACCCCTC CTGCCATGAA GAATGCCACT AGCTCTAAGC AGCTCCCACT GGAACCAGAG AGCCCCTCAG GGCAGGTCGG
GCCTAGGCCA GCCCCCCGC AGGAAGAGTC CCCTTCCTCT GAAGCAAAGA GCAGAGGACC CACCCCACCA GCCATGGGCC
CACGGGATGC CAGACCTCCT CGAAGGAGCA GCCAGCCATC TCCAACAGCA GTGCCAGCCT CCGACAGCCC TCCCACCAAG
CAAGAGGTGA AGAAGGCAGG AGAGAGACAC AAGCTGGCAA AGGAGCGGCG AGAAGAGCGT GCCAAGTACC TGGCGGCCAA
GGAAGGCAGT GTGGCTGGGA AGGAGGAGAA AGGCCAAGGT GCTGCGGGAG GAAGCAAGCT CCATGGAGGG CCGCTGCCGG
TTTTAGGGAG CAAACGTCTT AAAGCCGAGC AACGCCGTTC AAGCCTTGGA GGAACGGCTA GCGGAAGAAG TTTGTGGAAA
ACAAGGGGCG

SEO ID NO:62: (Length of Sequence = 478 Nucleotides)

ATCATTEAGT ACGCAGAGCT CAAAACAGAC GTGTTCCAGA GCCTGAGGGA AGTGGGCAAT GCATCCTCTT CTGCCTCCTC
ATAGAGCAAG CTCTGTCTCA GGAGGAGGTC TGCGATTTGC TCCATGCCGA CCCTTCCAAA ACATCTTGCC TAGAGTCTAC
ATCAAAGAGG GGGAGCGCCT GGAGGTCCGG ATGAAACGTC TGGAAGCCAA GTATGCCCCG CTCCACCTGG TCCCTCTGAT
CGAGCGGCTG GGGACCCTCA GCAAATCGCC ATTGCTCGCG AGGGTGACCT CCTGACCAAG GAGCGGCTGT CTGTGGCTGT
CCATGTTCGA GGTCATCCTG ACCCGATTCG GAGCTACCTT CAGGACCCAT CTGGCGGGGC CACCGCCACC AATGCGTATG
ACGTCGATGA GTTTTTGAGT TCACTGCTGT GAGCGCATGA GTCGTGTACT GAATCCTGTG GACAACGGTT AAGTTACA

SEO ID NO:63: (Length of Sequence = 183 Nucleotides)

CCTGGAAAGT GGGGGGGGC CAGGGGGCCA GGCCCAGCAT GCACCCCCAT TTTTTTGGGG GCTGATCCCT GCCCCAGCTC TGCTGATACC CGGGGCCACA GCGTCAGGCC GTTGGGGGTG GAGKTAGAGG TGGGAGAGCA GGGGAGAGAG CCTKAGGAGC CACAATTGGG CAGACAGAAG CGG

SEO ID NO:64: (Length of Sequence = 316 Nucleotides)

GGATATIGCA CCITACAGAC TIAGGGAGCC TITACCAGAG ACGCCIAAAA CGCCCCAGGI TCAGCCATIG TGCIGAATAG AGTAGGATAT AGAACCAGGG ACAGAGIATI TCATITIAACG TIGATATATA CTIGCTAAGG AAACACIAAC AATACTGIAA CITGITAAAA GGACATAGIA TIGAAATGGG AAATAGAGGI CAGGCTCACA TCATCTIAGI TIAATGCTGG GCAACTTTTT CIGATTICIG TAGTTCCCIG GAAAATGIGI CCITCGTACC CATAAAGTGG TACAAATGCA TTTGTAACCA TTTTTG

SEO ID NO:66: (Length of Sequence = 411 Nucleotides)

ATCTGGTCTA GAGAGGGGAC TCCAAGCTCT CTTGCTGGCT CCCAGCTGTG GGAATCCTTT AGGCTTGTTC TCAACCTACA
CGTTAAAAAT GCTTCTTGGT GTGTTTGGGG AGGGGGAGAG GGAAACTGAG CTCTCTCTTG ACCTCCTCCA ACACCCTTGA
CTTGCTTACC CAGCCATTTT CAGTAGCTAC ACGGGTGGTC ACAGAACACT GGGCGGCACT CGGCACACAA CACAGAACCG
GGGCAGTCCA TGCAGGTGCG GGAACACATG TCGGACCCAG GGAGCAAGGA ACACGCCACC CCGAGGAACA TGCAAACGGA
GGAAGGATTC CCTTCAGATT CCAAGGATGC CACAACCCCG ACGGCGGCT TAGGGAGGCA CCGATTATCT AAGGAAAAAG
GCCACTGTTT G

SEO ID NO:67: (Length of Sequence = 413 Nucleotides)

CTGCTCCTTA TGTTTTTATT TCCAAAGTTT AGAATTTCTT TGCTTCATAG TATTATTTTA TTTTACTAAA TTACAGAGTA AGAAAAGCTT TTCATTTTAT CTGATTTTAT TCTTAGAACA AAAATATTAC GATCTTCTAT ATTTTTGTTC TTTTGCCAAA

AAGTGTAGGC AATTITACAT CATCITTTT CCCAATCAGT TIGIGATCCA ACTATAAAAA GGAGACATAG AATACTGAAT
AAATGAAACA GAAACTCCAA GGCCAAGAAG TGTCCATCIT GAAAGAGTGT TAGTGGCAAG ATATGTGACT GCAGACTAGA
TGTAGACAAA CCTGAGAAAA ACCAAGCATG GGGGAAAGGA TYCCTATTTT AATAAATGGT GCTGGGGAAA ACTGGCTAGC
CATATGTACT TTA

SEO ID NO:68: (Length of Sequence = 372 Nucleotides)

GCACGGITAA AAGACCAACG TGIGIGGNIC AAATATAAAG GCCACACCIT TCAGACCGAA CCTACTCAAA GATCCTTTAC

TTIGCAATAA TITIGAACTGG AGAACCAAAG ACGGGAGACG AATGAAAGCA AAGATGCTCA AAGAACCAAA GGAAAGACCT

GAAGGAATCC ACCTGCATAG GCCACGCGIT CCACTCTGGG TCAAATGCTT CCACGATGCA GAAACCTTTT TTTAAAAAAG

TGCAAGTCTA ATTACCTACC AAGGGTAATA AAAAGCACAG CACAGGAATG ATTACAGCTG ATGGTCAAAA AACAAACCAA

AACCATTAAA AAAACAATCA GGCAGAAAAC AGGAGTTAAA TGTTTACATA TG

SEO ID NO:71: (Length of Sequence = 329 Nucleotides)

GAAAAAATGG GAGGCAGCC ATGIATIAAT TGIACATCCA AGGAAACTGI GCCCCAGGGG TCITGIGIGI ATTTCTGAGA
AGAGGGGTGA GAAAAGGCAC TGIGICAACA TTIGCITCTG CCIGAACGIG CACCTCCCAG TGCTCCTCCA TCAATTAGGA
GAACTGICTT GAAGAATGCT GCCTCAGCTT CTGAAGAGAA GACCCCAGGA CATGCATTAA TGAGAGGAGG GGAGTCACAG
CTGCAGAAGA ATAAAGCTCT CTGAGGGAGC CTGGGAGCCC CCAGTGGAGG CCTGGAGCTT GTTGACCANN GCAGCAGGAG
ACCCCTGCT

SEQ ID NO:72: (Length of Sequence = 418 Nucleotides)

CTGAGTTGCC TGAGGTCATT CACATGCTTC AGCACCAGTT CCCATCTGTT CAGGCAAATG CAGCGGCCTA CCTGCAGCAC

CTGTGCTTTG GTGACAACAA AGTGAAGATG GAGGTGTGTA GGTTAGGGGG AATCAAGCAT CTGGTTGACC TTCTGGACCA

CAGAGTTTTG GAAGTTCAGA AGAATGCTTG TGGTGCCCTT CGAAACCTCG TTTTTGGCAA GTCTACAGAT GAAAATAAAA

TAGCAATGAA GAATGTTGGT GGGGATACCT GCCTTGTTGC GGCTGTTGAG AAAAATCTAT TTGATGCAGA AGTAAGGGAG

CTTGTTACAG GAGTCTTTGG AATTATCCCT CATGTGATGC CTGTAAAAAAT GACATTCATT CGAGATGCTC TCTCAACCTT

AACAAACACT GTGATTGT

SEO ID NO:73: (Length of Sequence = 336 Nucleotides)

CTGAATTTT ATATECTICA CTIAGGCTT CATTIGAGIA GACTCTAAAA ATTCTGCCTT GCTTAAGINC TAACACTGCC

TCTCAGATTT CAGTTTTGGA CATTGCACAA CTAAGACCTT TTAAACGCAT TINCTTGCTA ACTCGGAAGA CACATAGTCT

GCAGCAAGAC ATTCCTATAT TGAAGAAATG AGAGAAAATT TTATGCTGCA TCAGGTGGAG AGCAAGGCTC AACGGTGGTT

GCATTAGTTC CCTCCGGAAGI ATTGAAAAAN CTTTGAAATG GGAAGGAAAA TTTTTTTGCAC CTAATGTTCC TGAGGTACCC

AGAATGTCTG GCGTT

SEO ID NO:74: (Length of Sequence = 402 Nucl otides)

GUIGCUCAGIA AATACAAATI GGATGGACIA GAGAGATAGC CCCGAGGACA CUGCCAAATA AATAACAAAT TGIGCAAGCA GCAGGCCGCT GUAATIAGAC CAAGGAGGAC AGUCAGTTAT TAATATCAGA CACGUGGCAG GGITAACAGC CACUGAGGGT GGGAGACAACT AAAGAGGGCT GAACAGCACC AAAGGCCCTC GCUGCCTCG GUUCCUCCCACAACT AGGCCCCTCG GUCCCCCCCACAACT AGGCCCCTCC CCCCCACAAC CCCCCCACACC CCCTCAGCC CCTTATCTGG CCAGCCATTA TGATGCCTAT CAGTATGAGG CCAGATGAGA GT

SEO ID NO:75: (Length of Sequence = 454 Nucleotides)

GEACCCOGG CCCGCGATGT GGCCCAGTAC CTGCTCTCAG ACAGCCTCTT CGTGTGGGTT CTAGTAAATA CCGCTTGCTG
TGTTTTGATG TTGGTGGCTA AGCTCATCCA GTGTATTGTG TTTGGCCCTC TTCGAGTGAG TGAGAGACAG CATCTCAAAG
ACANATTTTG GAATTTTATT TTCTACAAGT TCATTTTCAT CTTTGGTGTG CTGAATGTCC AGACAGTGGA AGAGGTGGTC
ATGTGGTGCC TCTGGTTTGC CGGACTTGTC TTTCTGCACC TGATGGTTCA GCTCTGCAAG GNTCGATTTG AATATCTTTC
CTTCTCGCCC ACCACGGGA TGAGCAGCCA CGGGTCGAGT CCTGTCCCTG TTTGGTTGCC ATGCTGCTTT TCCTGCTGTG
GACTTGCGGC CGTTTGCTCA TTACCGGGTA CACCACGGAA TGCACACCTG GCTT

SEO ID NO:76: (Length of Sequence = 313 Nucleotides)

GCTTTGATAG CTAGTIGICT AAAAGIGCIG NITATTAAAT AATCCACCIN TITCCCCACT TAAAACATCC CTCTTACCAT
ATACTAAATT CCNGTAGCCC TGGGTCTGTT TCTGGACTCT CCCGTCTGTC TGACCCCCTC CAGGTCACAC TGAGTGAGGT
AATGGTGGCG TGAGAATCCT CTGGGAATCT GGCAGGNTCA CCCCNGAGCA GTCCACCCCN CAACTCATTA NCATCGTTCA
GAGTGGNCTG AGTGNTCTCA CACATTCACT CTGCCAAATG CACTTTAGGA ACTGTCAAAT TCCAAAGITT CAA

SEO ID NO:77: (Length of Sequence = 446 Nucleotides)

CTCAGCOGTA GCCCTAAGTC GITTITCCAA TITAGGAAGC TCACAACGCA GATCIGCAIT GICACGIACC AGCIGITIGI
GAACCITIGI AAGCIGITCC AGGITGITCI CAAGAAAGGA AATCITCIGC TITIGGGAGI GAATCCCCCC ACIGICITCG
GGCTCCATIT CIGCACTITI CITGACTCGA GICGIGACGI CITGAACGAA CAGCITGCGA AGGITGIGGC SGGTCIGGAG
TTCCCCGGCA ACIGICICCI CCAGACCCIT GAGGICCIGC TIGIGACTGC TCAATGICGC TCGIACAGAA ATGICAGCIC
CIGCAGCTIT GGIGCICITC TCGIGGITCI TCGCICTITC AGCTTTCCG TAGTCAAGCC TGAAGGCTIC TCTAAGCICT
AACIGGAGCT TCIGATTTAA GGICTITTGA GCTCATCAAA TCGICT

SEO ID NO:78: (Length of Sequence = 296 Nucleotides)

AGCCCGTIGGC GCAATGGAGA GAATGTGCCT GAGACAGAGC GCCTGGCTGG GGAGGAGGAGCA GCCCTGGGAG CCGAGGTCTG
TGAGGAGACC CCTGTGAATG ACAACTCATC CATCGTGGTG CGCATCGCGC CCGAGGAGGAGC GCAGAAATAC GAGGAGGAGA
TCCGCCCGTCT CTATAAGCAG CTTNACGACA AGGATGATGA AATCAACCAA CAAAGCCAAC TCATAGAGNA GCTCAAGCAG
CAAATNCTGG ACCAGGAAGA GCTGCTGGTG TNCACCCGAG GAGACAACGA GAAGGT

SEO ID NO:79: (Length of Sequence = 285 Nucleotides)

CCTITCCTEC CTGGGAAGTG ATGACTCGCA GGTCGGGCTT GCGGCTGGGG GCTCCAAGCT GGGTGCTGTG GGTAGGTGGG GGCGGAGACT TGGCAGGGAT GACCTTGTTT AGGCTGTTGC CATTGGCCAC AGGGAGGAGG CCAGGGGAAG CCCGAGCACT GACGTAGCCA TTCCCAACAG GGCTGGGGCA GGCTCCGTTA GCACTGTTCA GGTCACCNCC CAGCATGGCC CCCGCACTACGCTG GGGCAGGCCA GGAGACACAC TGTTCCTCTG TAGTG

SEQ ID NO:80: (Length of Sequence = 402 Nucleotides)

-

ATGATTTCTT GCCTGINATA ACCTATGCAC TCACAAAGAT GAACTCTCTG AGAGGGATGA GCAAGAGCTT CAGGAAATCC
GAAAGTATTT CICCITTCCT GTATTCTTT TCAAAGTGCC GAAACTGGGC TCGGAGATAA TAGACTCCTC AACCAGGAGA
ATGGAGAGGG AAAGATCACC GCTTTATCGC CAGCTAATTG ACCTGGGCTA TCTGAGCAGC AGTCACTGGA ACTGTGGGGC
TCCTGGCCAG GGATACTAAA GCTCAGAGCA TGTTGGTGGA ACAGAGTGAA AAGCTGAGAC ACTTGAGCAC ATTTTCTCAC
CAGGTGTTAC AGACTCGCCT GGTNGATGCA GCCAAGGCCC TGAAACCTGG TGCACTGCCA CTGCCTTGAC ATCTTTTATT
AA

## SEO ID NO:81: (Length of Sequence = 246 Nucleotides)

CATTITIAAT AGAGACGGG TITIAACCATG TIGGCCAGGC TGGTCTTGAA CTCTTGATCT CAGGTAATCC ACCCACTATG GCCTCCCAAA GTGCTGGGGT TACAGGTTTG AGCCTCTGIN CCCGGCCCGG CCAAAGACTG CCTATTCTAA ACGTTGCTGA GGACGTGGAN CAATCACAGC TCTCCTNTCT TTCCAGTGGG AGTTTAACAT GGCACAACCG CCTGAAAACC GTTTGGNGAT TTCTGT

#### SEO ID NO:82: (Length of Sequence =394 Nucleotides)

GOGAACCCTC AGCAAAATAT AATGGTACCG CTATTATCAG CCTTGTTCGA GGCCCAGGGA TTTTGGGGGA GGTCACAGTG
TTCTGGAGGA TATTCCCTCC TTCCGTGGGG GAATTTGCTG AAACATCAGG NAAACTGACA ATGCGAGACG AACAGTCTGC
AGTCATTGTA GTAATACAGG CTTTGAACGA TGACATTCCC GAGGAAAAAA GCTTCTATGA GTTTCAGCTC ACTGCAGTCA
GINAGGGAGG AGTTCTGAGT GAATCCAGCA GCACTNCCAA CATCACGGTG GTGGCCAGCG ACTCTCCCTA TGGCCGATTT
GCCTTTTNAC ATGAGGCAAC TTCGAGTGTC AGAAGCACAG AGGGNTAACA TCACAATCAT CCGTTCCAGT GGAG

### SEO ID NO:83: (Length of Sequence = 308 Nucleotides)

### SEQ ID NO:84: (Length of Sequence = 313 Nucleotides)

CTITAACITA AIGGCAATTA AAACICACTG GCAAAAAAAA TCACIAGAGA TGICAGICCA TIATCITACC AAATAGIGIA
TTITTACCAT CITTIACCIA CACCCITGAG TAAGGIGGAA TAGGITAAAG TTACIGGCAT AATAACACIT CATIGAATIC
ATGATAGIAT TIAACATGIT AAAACIGITT AGITGAAAAG TICACATGCA ATTIATAATT TAAAAATATG CIACATATAT
TTCATAAAAW TACAATAGGI CATACTARAC TITGACTAAA ATTAAGAATG TKITTCIKIC ATAATAATGC AGG

### SEO ID NO:85: (Length of Sequence = 303 Nucleotides)

TGCTCCGTTT ATTGCTCTAT TCAATGACCA CGAGCGAATT ATAAAAAGAC ACCAAATGTC TCTGTCTGCC GTGGGATAAA
TATTTAAAGT CAGCAATAAA GTCACGTGGC TCCAAGRTAA TACATGTTGC CAAAGAGTCA TGCATGCCCT CCTGATGGGC
TCTCAACACA CGTATGGWCA TGGGAACACA CGCAGAGCAA CACGCAGTAT GAACTTSTGG GAAGGCTTTA CCACAGTGAC
ACAGTAAAAT GTCTCACGTA GATCTGRGCT GAGTCCCCCAC CCAAACCTTG AGCTCCCCTT CCA

### SEQ ID NO:86: (Length of Sequence = 380 Nucleotides)

SEQ ID NO:87: (Length of Sequence = 280 Nucleotides)

GOCTITIGCIG CITATICGCA ICGAIGGIGA AAGAGAIGIC AGGAGCACIT CICIGCIGAG GIGGCIGAGA CGAAGAGAGAC ICIGCIGCCA GOCTIGCCGC ATACCIGGCA ATTAGCCIGI GITCITCATC AAGCCGITT GAACICICAA GCAIGCICCI GGIAATAAAA GGACITCCIG AGGAGGGAAC AGAGIGNGAG AACAGGGIGI CGITCAIGCI GGITACAGGI CIGGGAGGCA CGAIGIGGAGC CAAGITGAGI GCCITCICAG GCIGAICIGG

SEO ID NO:88: (Length of Sequence = 446 Nucleotides)

CCTGCGTCTC TTACACCCYC TCCCACCCGA GGCTCCCCAG AGATAGCAGA GAATTCGAAG AGGTCGCCGG GGACTGGAAA
GAAGTCCCAG NAGGCCGCCT TCGCAGTCTA CACCCCAGCC TGCTTCCCAG CCTACAYCCA GACCCAGCTC AGACCTTCGT
GACCACCCCA TCCCTTTCTC CGGCTGGCTG GGTCGGGGGC ATCCCTCTCT GTCGCTGGCT TCCAGAGGCA GGACAGGCCT
CCTGGTAAGC CCGCAAAGTT GCTGACCTCC TGACTTCGTC TGCCTTTTAT TAATATCTGT ATTGCTGATA ACCGTGCTCT
TGACTATGTG TCCCAGGTCA TGTCCCAGGT CATGGAGAAG CCCGTGCCAC AGTGACCCTT CCCATACTTC TGGGGGGGCT
GCTCTCCATC TGGATCGTAG GAGGATATAG GTGTGTTCTG GACCAT

SEQ ID NO:89: (Length of Sequence = 384 Nucleotides)

GICCCTTCTG GGGACTCTRT TTCCCCATTT AFTGCTGCTG TGTCCCTNAC CAGTTCCTTG CAGGATTCCC TCCTTTAAA
ATGCCCTTAA ATCTAGCTTT GCCTTGGAGA CCCCAGTGGG TGCTGCTCCT GCCGTTTTCT TCCTGCCAAG CCTGAATCAA
TGTTTCATCT CCAACCCTCT GCCAGTTTGG CCCCTCAAAG CTTGGTGGCT CAAGACTGTW AGCCTGGCAG AGCCGCGAGG
TGAAGGGAGA AGCTCTTGGA GCAGGCAGGA TGCCACCGCT GCTTCAGCTT GCCTCCTCGC CCAGCTACCC TTTGGCCCCA
TTGGGCCCTC GIMTGCCTCT CCAGGATTGT ATGTTTCAAG NCTTGTCCTG TGTTCCTTTG TCTG

SEO ID NO:90: (Length of Sequence = 344 Nucleotides)

TCAAGCTGGA AAGGGCTACT ACCTCATGCT GGAAAGGGCT ACTACCTCAA GCTGGAAAGG GCTACTACCT CAAGCTGGAA
AGGGCTACTA CCTCAAGCTG GAAAGGGCTA CTACCTCAAG CTGGAAAGAG CTACTACCTC AAGCTGGAAA GGGCTACTAC
CTCATGCTGG AAAGGGCTAC TACCTCAAGC TGGAAAGAGC TACTACCTCA AGCTGGAAAG GGCTACTACC TCAAGCTGGA
AAGGGCTACT ACCTCAAGCT GGAAAGAGCT ACTACCTCCA AGCTGGAAAG GGCTACTACC TCATGCTGG AAAGGGCTAC
TACCTCAAGC TGGACAGGGC TACT

SEO ID NO:91: (Length of Sequence = 364 Nucleotides)

GOCCCAGGGT GAGGGCTATG AGGGGTCAGG GGTCAGGTTC CCCAGGACCC TAGTCCTTGT CCCCTTCCCT GGTGCTAAAT

AAAAGTGAAT AAATACTAAA TAAATACAAC TGGGGCCCAG GCCCTCCCTG CCTTCCCCCT CCCTCCTGTG ACCCGCAGCA

GAGGGGGCAG TTTAGATGGA GGGCTGTCTG TCAGCCCCTT CCATCCACTA ACCCATCACT GCCTCCCAGG GCAGGAAACC

AGGGCAGGGC CAGCCTGCGC ATTAGGGCAG AGAGGAGGGG CAGGTCTCAC GCCCACAGCC CCTTCCCACT TGAGTCTTAG

CATGAGGCAG

SEO ID NO:92: (Length of Sequence = 218 Nucleotides)

ATTTAATAGA AAATTAAAAT AATAAATAAT ATGAAACAGA CTGATAACGC TGAGCTGGGC AGGCCCAGGC CAGTCTAGTA CAAAGTTAAG GAGGTAGGGA GGATGGTGGG GAGGAGGGG CGGACTACCC TGCAGGACGC GGGAGGCTGC TCAGACTGTG GTGATGTCAG GAAGGGCCGC ACACTTTGGC ATGGACGATG CACTAAAAAA AGAGAAAG

SEQ ID NO:93: (Length of Sequence = 364 Nucleotides)

GCTTTCAAGG GAACAAAGAA TCGGCCTGGC AGTGCCCTGG AGAAGGAGGT GGAGAGCATG GGGGCCCATC TTAATGCCTA
CAGNACCCGG GAGCACACAG CTTACTACAT CAAGGCCGTG TCCAAGGATC TGCCGAAAGC TGTGGAGCTC CTGGGTGACA
TTGTGCAGAA CTGTAGTCTG GAAGACTCAC AGATTGAGAA GGAACGTGAT GTGATCCTGC GGGAGATGCA GGAGAATGAT
GCATCTATGC GAGATGTGGT CTTTAACTAC CTGCATGCCA CAGCATTCCA GGGGCACACC TCTAGCCCAG GCTTTGGAGG
GGCCCAGTGA GAATGTCAGG AAGCTGTCTC GTGCAGACTT GACC

#### SEQ ID NO:94: (Length of Sequence = 423 Nucleotides)

CITCATACTA GAACTGICTG CCATCITIAT TICTITGITT TCAGGAAAAT TGGAGAGAAA AGIATITCIT TITTAAAAAT GATIATIATA CITTAAGITC TGGGATACAT GIGCAGAACG TGCACGITTG TTACATAAGI ATACACGIGC CATGGIGGIT TGCIGCACCC ATCAACCCGI CATCIACATT AGGIATITCT CCTAATGCIA TCCCICCCCT AGCCCCCCAC CCTCCAACAG GCICCAGIGI GIGATGITCC CCTCCCIGIG TCCATGIGIT CTCATIGITC AACTCCCACT TATGAGIGAG GGACATGCAG TGTITGATTT TCTGITCCTG TGTITACTTTG CTGAGAATGA TGGCTTCCAG ATTCATCCAT GICCTTGCAA AGGCATGAAC TCATCCTTT TATGGCTGCA TAG

## SEO ID NO:95: (Length of Sequence = 405 Nucleotides)

AACAGCCCCC GATCIGCATA GCCTGTGAAA GCCCACGGG ACATCAGTAA CCTTCTGCAG CCACCATCCA ATGCCATTAC
TGINAAGIGA GACTIGGCCA CIGTAGCCIG GGCCTGCTGC AGGAGCTCTT CAGAAAGGCA CATGAGGACC ACGGTTGCC
TCAGTTTCTG GTAAAACACA AGGTCTGGAG TGCCCCTGCA AAGGGTATTG ATGGACTTCC TGCCAGTGAC AGAGCATGTC
TATTGCAAAC AATTCTCTCA GTTACGTTCA GCACTTAAGA ACGGCTAATG NCAATAGGAT CTTTAGCAAC TTTTTCACAT
CATAGAAGGT GCAATCGCTC ACTTGGGAAC ACTACTGAGA GTGACTTCTC TTTTAAAATT GAGTAGCAGA TGAAAAATTA
AAATT

## SEQ ID NO:96: (Length of Sequence = 173 Nucleotides)

GAAGACAATA CIGATGCCAG CICITTGIAA TIGIGAAATC TGTACCCAAA CCICIGGATT AGAATCTCCA GITGICTACT GTAAATACTG GAATTACAGC AAAGGATATG GGGACTGGGC TGCITTTCTG TATTGIACAA GCACTATTCT AGATATTAAA GAAATTTAAC CGC

# SEO ID NO:97: (Length of Sequence = 337 Nucleotides)

ATGGCGCCCT ACAGCCTACT GGTGACTCGG CTGCAGAAAG CTCTGGGTGT GCGGCAGTAC CATGTGGCCT CAGTCCTGTG
CCAACGGGCC AAGGTGGCGA TGAGCCANIT TGAGCCCAAC GAGTACATCC ATTATGACCT GCTAGAGAAG AACATTAACA
TTGTTCGCAA ACGACTGAAC CGGCCGCTGA CCCTCTCGGA GAAGNITGTG TATGGACACC TGGATGACCC CGCCAGCCAG
GAAATTGAGC GAGGCAAGTC GTACCTGCGG CTGCGGNCGG ACCGTGTGGC CATGCAGGAT GCGACGGSCC AGATTGGCCA
TGCTCCAGTT CATCAAG

# SEQ ID NO:98: (Length of Sequence = 212 Nucleotides)

TGAAGCCCAA GNAGTINTGTG AAGACAGAGA ATGACCACAT CAACCTGAAG GTGGCCGGGC AGGACGGCTC CGTGGTGCAG TTCAAGATCA AGAGGCACAC GCCGCTGAGC AAGCTGATGA AGGCCTACTG AGAGAGGCAG GGCTTKTCAA KGAGGCAGAT CAGATTCAGK TTCGACGGGC AGCCAATCAG TGAAACTGAC ACTCCAGCAC AG

SEQ ID NO:99: (Length of Sequence =: 26 Nucleotides)

CCTTTIAATA ATAATTCIGC TGTCTGCTGT GTACTAGAAC CCATGCCTAC TGCTTGGGGT ATAATGTAGT AAATGTAGTA
AAAACAATAT CCGCCGGGCG CGGTGGCTCA CGCCTGTAAT TCCAGCACTT TGGGAGGCCA AGGAGGGCGG ATCACGAGGT
CAGGAGGGCG AGACCATCCT GGCTAACATG GTGAAACCCC GTCTCTACTA AAAATACCAA AAATTAGCCA GGCGTGGTGA
TGGAACCCTG TAGTCCCCAGC TACTC

SEO ID NO:100: (Length of Sequence = 333 Nucleotides)

AAAATGCTCA CAGTGGTCTT CTCTGGCCGG TGAGCCTACA GCTGATCTTG TCAGAGACAA ACGTTAGTTT TACTGAGTCA
CCCAGAGCCC TGTGCTGGTG CCTGAGGGTT TGTTCCATGG GACAGTCTCC ACAATTCCTC TGGGGAAGGG CCACAAATCC
CACAGTGTGT CCCAAGAGGG CTGGAGTAGG CGGAGTCCCC AGCAGCTGTG GCATGACCAG CCATCTCTCT CAAAACAATT
GTTAACAAGC CTTCTGCCAAG TTAAGGTTCC ACATGGTAGC CGTGGTACAG AGGCATTTCT CTAGGGTGGG AGAGGCTTGT
GCTGTACACC AGG

SEO ID NO:101: (Length of Sequence = 156 Nucleotides)

CTCTGACTIT CCTGTGGNIT TAGAGCCAAG CTCAAGGTAG TAGGCCGTAG GGNCTTATTT TATTTTCAAA CCCCCATCCT CAGAGCGCAG ATACATGCAG AGGCTTCTGC CAGGCTACCA CGGGCCTTA GTGGGAACAG GTTGAGACCA GCACTT

SEQ ID NO:102: (Length of Sequence = 331 Nucleotides)

CEAAAAGGG NINITATGGCC ATCTTTTATC AGAAAAAGTG ACAAAACGGG AATTTAAAAA ATGAATTTTC NINITGACTT
TATTINNAAA TACACTTTCT TTTTINNAAA ACCAATACAC TTTCTTTGAG GATGACAGTA TTAGGAAATC CAATTNNACA
AAAAATACTA CATCTAGTCT GGGGTAGATA TATTTATTTT TGGTAACATA CATTAAGTGG CACTAATTAC ACAGTAACTA
TAAGGTAACT AACATGAAAC CACAGAACTG TAACTCTGCC ACAGCTGCAT GAACTTGGGC TTTTCTGGTT GAGCCCATTT
TCAAAAAAACCT G

SEO ID NO:103: (Length of Sequence = 316 Nucleotides)

AGCCACIGGG CCCCACCCCA TITICGIGIN ANCICAGCTC ACTTCAACCT ACCCCTCCCA AGITCAAGIG ATTCICCTAC CTCAGCCTCT TEAGIAGCIG GGATTACAGG GGICIOCCAC CACGCTGGGI GATTTTCCTA TITITAGITG ACACTGCATT TCACCAGGIT GGCCAGGCTG GIGITGAACT CCTGACCTCA GCTGATCCAC CCGTCTCGGG GTCCCAAAGIT GTTGGGATTA CAGGIGIGAG CCACCACACC AGGCCCATAT TITICTITTAG ACATGCAGGC AATGTTGGTG GGTTTGTCTG TTAAGA

SEQ ID NO:104: (Length of Sequence = 308 Nucleotides)

GITTITCCIG CATCIATICA GATAATCATG TOGITTITGI ATTIGCCICI GITTATATGC TOGATTACAT TIATIGATTI
GCGITATATIG AACCAGCCIT GCATCCCAGG GATGANGCCC ACINGATCAT GGICGATAAG CITTITGATG TGCIGCIGGA
TTCGITTIGC CAGIATITIA TIGAGGATIT TIGCATCAAT GITCATCAAG GATATTGGNC TAAAAGIGIG CIGIATICAG
GAAACCCATC TCACGIGCAG AGACACACAT AGGCICAAAA TAAAGGGATG GAGGAAGATC TACCAAGC

SEQ ID NO:105: (Length of Sequence = 355 Nucleotides)

GECCTTCCTC AATATGTAGG CECCACTTT TCTCCCTGTG CCCTCACCTG GTCACCCCC TGTGCGCGAN ATCCCACTGT CTCTCTGGGT GTCCAAACTT CCTCTTCTTA GGAGGACACA AGTCAGATTG GATTAGGGCC CACCCCAATG GCCTCATTTT AAACTTAATCA CCTCCCTTTT GTTTGGGCTT TTTAACTTAA TCACCTCTTT AAAGACCTTA TCTCCAACTA AGGTTTCATT CTGAGGTATA CTGGAGGTTA AGACTTTAAA ACACGAATTT GGAGGGGACG TAATTCAGCC CATAACAATA ACAATAATGA CATCTTACAA CTTACTGCCA CCACCAAGCT TGCTG

SEO ID NO:106: (Length of Sequence = 355 Nucleotides)

GGATGAGGTC GCCGGGATCG TGGCTGCACG CCACTGCAAG ACCAACATCG TCACAGCTTC CGTGGACGCC ATTAATTTTC
ATGACAAGAT CAGAAAAGGC TGCGTCATCA CCATCTCGGG ACGCATGACC TTCACGAGCA ATAAGTCCAT GGAGATCGAG
GTGTTGGTGG ACGCCGACCC TGTTGTGGGAC AGCTCTCAGA AGCGNTACCG GGCCGCCAGT GCCTTCTTCA CCTACGTGTC
GCTGAGCCAG GAAGGCAGGT CGCTGCCTGT GCCCCAGNTG GTGCCCGAGA CCGAGGACGA GAAGAAGCGC TTTTAGGAAG
GCAAAAGGCCG GTACCTGCAG ATGAAGGCGA GGGAC

#### SEQ ID NO:107: (Length of Sequence = 273 Nucleotides)

GIGICICITI TAAAGAAAAC ATACITTATI TIGGICIAAA TIGGAAAAT ACCCAAAACA TITGATAGAA ATIGAACICT GICAACAGIG TIATITATAC TAAGATCAGG ACAGITCCIT GAGATCATAC TGITITATTA CIAAGIITGG CCTIGITTT ACAAATGIAA TGITCATATI TATITGAATI TIAAGATTGG TIAAATGITA ATGAAAAGCA ATCCAATTGI TANITITTAG TAGIGCCITT TCTCTGIATG CCTIAATTII ATT

#### SEQ ID NO:108: (Length of Sequence = 359 Nucleotides)

ATTITATITO CITACATOGA AGAAAATGIT AAAGAGTATO TGCAGACACA TTGGGAAGAA GAGGAGTGCC AGCAGGATGI
CAGTCTITTG AGGAAACAGG CTGAAGAGGA CGCCCACCTG GATGGGCTG TTCCTATCCC TGCAGCATCT GGGAATGGAG
TGGATGATCT GCAACAGATG ATCCAGGCCG TGGTAGATAA TGTGTGCTGG CAGATGTCCC TGGATCGAAA GACCACTGCA
CTCAAACAGC TGCAGGGCCCA CATGTGGAGG GCGGCATTCA CAGCTGGGCG CATGAAAGCA GAGTTCTTTG CAGATGTAGT
TCCAGCAGTC AGGTAACTGG AGAGAGGCCG GGATGAAGG

#### SEO ID NO:109: (Length of Sequence = 360 Nucleotides)

TITIATINAAAG CAGITAAACT TAGCATTAAA TAACACTCTT TAAATGGTAC ACCTATGAAG CAAGAGTTAA ATATAAACCC AGTCTAATCC TGTACACTTG TGATTAATTG TGACAATCTT AAGTTGCTCA CTTCTTTCCC ATTTACCAAT TCAGAGAAAG CCCGTTTCCT GTTTTCTCCT CACCACTTTG CCTTGGCATC ACACCAACCC TGCCTGGGC TTCAGCTGCA GATCCTCCCC AGCCCTCCT CCCAGCTGGG CTGACTCCAG TCCCAGCCCC AGTCTCCACC AACTGAGCAG CGTACGCAGG GTTGTGTCTG GCTTCCAGCA TCTACCAACC CTTCAGAGCA ACTT

## SEO ID NO:110: (Length of Sequence = 364 Nucleotides)

TCTCAGAGGG GCTCTGGGGG TCATTCAAGG GGGACTTCTA GCTTCTCTCT GGAACCCTTT GTCCAGAGCA AAGCCAGGTT
TCCAAGGTCC CCACGGCAAG GCTGTTGGGT GCTGGCAGCA AGAGGTACAC AGCAGTTCTC CCAGCTCACA GCAGTGACCT
CAGATCTCCA GCAGCAAGGG CCGCACTCTC GTGCCCACAA GGGCCTTGCA GAAATNCTCC GGTCCCTGGG NCTCCCCCGG
CAGGAGGGGC GGGGCTCCTG CCTGCAGTGA GGCCACAGCA CTAAGCGGCT TCAGTCACAT GCTTTTCAGG TGAATCACTC
CAAATTCAGT GAGGAGGGCC ACGACAAGGA AGTTCAGGTA GAAG

#### SEQ ID NO:111: (Length of Sequence =455 Nucleotides)

TITITITITIT TATATITIAA ATGGAATITA TICTATCAAC TECCTGAGGAG GACACAATGG GGGAGGGGCT TCGGACCACA
GCAGGAGCCC CGACTGCCCA CCTGAGGGCA GGGAGAGCCT GACCCCATTG GCCCAGGCCC TGGCTCTGTA ACCATTAACC
TCTTCCCCCCA ACTAACACCA ATGAAAACAC CATTCCACGT GACTGGGCTG TGTGTTTGCC TCTGTGACAT GGGGACCCCT
GACCCCTAGGG GTCTCGCCTG AGCCAGACCT GAGGGACCCA CCCGCGTAGG ATGGAGGAAG GTTTAGGCCT CCCTTTTGCC
AGCCAACGCC GGGGGTGGG GCAGACCCTG GGAGTGGGCC TTACAGACCA GCCACAGGTA TTTCTTAGGC AATTTGACAC
ATTTTATTAC AAAACCAGTC TACATTCATT CCTAAAAGGG TCATTTTCAG TAAAA

SEO ID NO:112: (Length of Sequence = 398 Nucleotides)

CTGATCTGAC AGGAGGTGTA GGTCAGGCAG TAATGGAAGT SATGGGGAAC AGCTGTAAAT ACAGATAAAG CTTTACTCAC
TCGCCCACCC ACTGCTCATC TCCTGCTGTA CTGCCCAGTT CCTAACAGAC AGCAGACAGC TACTGGTCTG TSGCCCAAGG
GTTGGGGGACC CCTGACATAG ACTAAACAAT TCACAATGTT TATATTAAAC AACTTATTCC AAGTTTCCAT TTTAGACTCT
GGAACATCTG ACATGGTGAA TCCACAGGTA GTAAATSGGA AGGGAGATAA CAGACAACTT GACGGCCGTG GAAGACGCAC
TGGGGGGGCAC CTGGTGACGG GTCTCGGGAC AGACTTCACA TCTCCAGACT GGCACAGTGG GCTCACACCT GCCTCCCA

SEO ID NO:113: (Length of Sequence = 444 Nucleotides)

ATCAGTGTCA GIGICIAACA GAAGGGTCTG TTAAGGATGC TTCTGATTTA ACCAAAAGAT TAAGCTTCAG AAACAATCTA
ACATACTCAA AGGAGCACCA AATTATCAAC CGGCTACAAG GATGCAAAGG ACCTAAACAA CAGATGTCAA AGGGCTTGTA
AAAACTGGAG CCAGCAACCA TTCCACTTGA AGGAATCCAT CTCAGGGAAA TGCTGGAATC CACACCAAA AGCAGTGTG
CAAATAATCA CTGCAGCACG CCTTCTAATA GTGAACAACA GAGGCAATCC AAATATCCTT CAACAGGGAA CTGAGTAAAT
ACCAACTATG GGCATATCCA CATAAGGCTC TCTGCAGTCA TTAAAAAAGGA TTGCACTTAC ATGCATGTCT GCCATGGAGG
TCTTTCAGGC CAATGGTTCC ACTCGGAAGG GCAACCACCA ATTA

SEO ID NO:114: (Length of Sequence = 472 Nucleotides)

TOGGGCCCCA ACGEAGACCT GGGGATGCCG GTGGAGGCGG GAGCGGAAGG CGAGGAGGAC GGCTTCGGGG AAGCAGAATA
CGCTGCCATC AACTCCATGC TGGACCAGAT CAACTCCTGT CTGGACCACC TGGAGGAGAA GAATGACCAC CTCCACGACC
GCCTCCAGGA GCTGCTGGAG TCCAACCGGC AGACACGCCT GGAGTTCCAG CAGCAGCTCG GGGAGGCCCC CAGTGATGCC
AGCCCCTAGG CTCCAAGAGC CCCCAACCGG GACCCAACCC TGCCTCCCTG GGGCTAAGCT CTGGCCTGG GCACTCACCC
CCTGGCTTAG ACAACTTCTC AAGGGCTTGG CCTTCAGGGG ACCCTTGTGG GTCTTGCCTT GCTGGGGCCA CCTTTTCTTG
CTTGGGGCTT CCCCTTTGGC CTACCTTGGG GCCAAGCCCC TACCAACTTT GGATTGCCTT CTTGGGGGCC AA

SEO ID NO:115: (Length of Sequence = 293 Nucleotides)

CINGGGGCCA TGTGGCTGAT TTCCATCACC TTCCTTCCAT TKGCTACGGC GACATGGTGC CCCACACCTA CTGCGGGAAG
GGTGTGTGCC TKCTCACTGG CATCATGAGA GCTGGCTTTA CCGCGCTCGT GGTGGCTGTG GTRGCTCRCA AGCTGGAGCT
CACCAAGGCT GAGAAGCACG TGCACAACTT CATGATTGAC ACTCAGCTCA CCAAGCGGGT AAAAAACGAG GCTGCTAACG
TTCTCAGGGA GACGTTGGCT CATCTACAAA CATACCAGAG CTGGTGAAAG AAG

SEQ ID NO:116: (Length of Sequence = 448 Nucleotides)

TTTGAAAATT TAGAGGATAT TTATTTCTCA GGAAGGTGCA CAACAGCTGG CAGGCACTGC TTTCCCTGCT CTAGGGGATT
CCTCTCCCT TTTCCAAGAA ATCCCCTCTC TTCTTAGAAG TGCCCATGGG AGGCTGGGAT GTGAAAAGAA ACCATACACA
ACACTCCAGA GCCTTAAAAA AATAAAGCAA CAACCTCCTC CACACGAATA CACTTACAAA ATAAATAGAC GGATAAAAGA
GAGGCCACGT GCCTCCCATC CCGGCTGTAG GGCTGCTTGG GGATAGTGGG GCTGGGTGGC TCGGTCCCAC TTCTCCCAGC
CAGGATGATC CAAAGGCTAA ATGGGATGGA AGGGCCTGG CTTCAGAGA GAGGGTGGGG CAGGCCTCTC CTGGTACTCA
GCAGGGAGGA CACTGGGGCA CGGGTAGGGG TCCAAGGGCC ACTTAATA

SEO ID NO:117: (Length of Sequence = 551 Nucleotides)

TACCAATTAA CCCATCATTG CITTTAAACA ACCATCIGAA GGAGCAGAGA GGCAGGGTAG AAGACAGAAG GGGGTCTATG
TGGGTACTAA AGATGTTTCT GTTTTGTAAT ATTGTGTGTG TGTGGGTTTA TGGTTTGCTT AAGGGATCAA AACCTGGAAA
AAATGGGATT CCAGGAATGG CTCTGTTATT TTTGCTGGGT TCCAGCTTGT AATGCCTACT GCCTTGGTTC A

SEO ID NO:118: (Length of Sequence = 426 Nucleotides)

CCCCACCCCA AAATCAAAAC TGAAGGTAGT GTCAGTGTAT ATATGGNGTC CCTTGTGCTG AAAGTCAAAG CAGCTTCATT
TTGGGGCCTC AAGAGCTCCA GCTCTGGGCT CTTCACCTCT AAGCCCATGG GCAGTGCCCG CCCAGTGGTG TGTATAGATC
GGAGGCTGAG GGCCTCACCC TTAGCTGAGC TGTCGCGTGC TGGGGGAGCCT GTGCAGGAGG GTACAAGTAG GAAAGTGCCA
TCTGCATGGG AAGAAAAATG CAGCGTCCTT GGTAGTGCGG ATGGGGTCCCA GGAGACCCAG GGAGCTTGCC CAGAGGGACC
TGAGTGGCAT TCCTGTAGGA AAGCAGCCCA GATCTTGGGG CCGTAACGGA TGTTCTGGAA GTTTTGACTT TGAACCACCA
GGTCCCCATTG TTAACAAGCT TCTTGA

SEO ID NO:119: (Length of Sequence = 434 Nucleotides)

TITITICOGIT AAAAAGGCCC AAAACITIAT TIAGITITCA GGGAAATATA AGATGCATGT AAACATAAAA TACAAAACAA
AACCCAAATC TIACAGICTA GAAGCATGCC AAGACAGAGC ATTITICTGCA GACCAAAGAG TCCCGTCAAA GTGATAAAGG
ACACCTGGAA AGTGGCAGGC CAAGGGCCTG GTCCCTTCCC CAAGGGCACT GCATTITTGT GATGAGATTA AAAACAAACC
AACTCCACTA TIAAAAATGC TAGAAACATG GGATAGITTA GCACCACCAT TGATTCTGGC AAATATTTCA GCACTCACAT
CGACTGCACT GAGITTAATG TCCTTTCTCC AGITTCTCTG CTGAGTAGGG AAGGAGGGAA ACCTGGGCGG AAGGGGCTCC
TCCTGACCCC ACAGGGCCAC TAGGAGCTTG GAGG

SEQ ID NO:120: (Length of Sequence = 276 Nucleotides)

AGGAAGGIT AGCAAATGCI ACCATGIGGA ACACTCAACT TTATTIGCIT TATTIATATA TTTAACAATT CTAAAGTATT
TACTICITGC TITGACAAAA AATGAAAAAT ATAGGGGCAC TGACTGACTC CTCTTTAGGA GAAAAGGGIT ATATGTACAG
CTATGGAGGG TTACGGITCC CCCTTTAACA AAGGCAAATA TTAATAAAAA AGGCCTTCAT CGGTCAAAAA AGGCTAAGA
GCTGCAAGCA TITATTCACA CTGTACATCG GGCCCC

SEO ID NO:121: (Length of Sequence = 554 Nucleotides)

ATTICITICO TIAATCATAT CIGATGCIGG GATGIGGGIA ACCCCAAACT GAAGGCAGCT GCTAAATCTC AAATGCTAAA

AAAATACIGC AATTITGACA TCAGTGAGIC AGATCAATAC ATCCTCIGG GCTGATITTG CITCACAGIT AGGATGAGCC

ATCTCTTAAG CIGCAGGCTC AAATGGGATT AACTGAACTC TATACCTGGG ATGGGCCAG GACTGAGCTG TCCATGCAGA

AGGACCAGGC TGTCCATGCC TTCCCTGCCC TTTTACTCAC CACTGCACAG CAGCCCCAGT GGGCCTACTG CACATGTCTA

GGAGAAATCA CTCTAAGAAA ACCAACAGGA ACAGGCTTTA GGCAACAAGA GACGTCTCAC TGCATCTCCT CCCACGTCAG

AACTTGAGIA CTGGGTCTTT GCAGCTCAGA GCATTCCTCC CTTCCCTTTC CTGCCCGAAA GGCCTGCCTT TTCCTGAGGAC

ATATGGCCACT CCATGCTGCA AGTTTCAAGC AGATGCAGGT TCTTATGGGG CTTTTTGCTC AAAGAGCTTT GGTT

SEO ID NO:122: (Length of Sequence = 238 Nucleotides)

CACCTAAGCA GGTAGACATC CGCAAAGTCA GATGCTTTCC AACATGACAC CTGAACATCT TCCTTTATGC AACACCCAAA CATCTTGGCA TCCCCACCCC AGGAAGTGCG GGGAGGAGGT TATGATCCCT GGGCGCTTCG GCAGAATGGA GAGCTGAGGT GTCCCTCCCC TGCTAGTCAC CTACCAGGTG TCTGAGCAGC TGCATGCTCC CTGGCTCAAG TGGGCACTGT ACCTTTTG

SEO ID NO:123: (Length of Sequence = 244 Nucleotides)

ATCCAGGCTT TCATTTCTAG CCAACCCTCA AACACCACCA ACTACAAAGA AAATTTAAAA GTCTAATTTG TAACCTTCAG
ATAAGTATAA ATTAGTTTTT TCTAGGCTTT CATTATTTGG CTTCTTATAC AATCTATCTT GTAAAGTACA TTCCTCTAAA
TTTACATTAT CTAAAATTAA GGCTAAGCAT TATTTAAATC ANTTAATCAT ACAATATTTT ATGGCAATAT GCACATATTT
ATAA

#### SEQ ID NO:124: (Length of Sequence = 330 Nucleotides)

CTCAGCETAT CATAGGCETG CTCACCCTCC TCCCCACGCT CCCCCCCCC AGGCAGGTGG TGTAGGATAG AGTGGTGCAT

GAAAGGGGGG AAGCCCGAGG GCCCGCTGG GAAGGGTGCT CCCCGTAAA GGGCAGGTGG TGTAGGATAG AGCTAGTTGG

CCCTTTTCTG CTTCAGCTCA GCCAGTCGCC GCCGCTGCTC TTCAATCACT TGTTGTCCCT TCTGCTGCAG AGCTAGTTGG

GCGCTCTTTT

GCGCTCTTTT

### SEQ ID NO:125: (Length of Sequence = 281 Nucleotides)

CCTCTCTCCC TICGGITCTC CATTIACCGA GCCACAGIAT TICTIAAAGC TCGITGGCAG CCTGCACCCI GCTIATTCTT
GGGAGACACG AGITTGCATC CIATTACAAC CCATAGITTT TGCATAACCA TGGIGAGAGG AACCATCCTT CCCAATCCCA
ACCTCAACCA AAGCTTAGAA AAAGIGCCAT CNITAACCTT TCAGAATCAC TCATAAGIAA ATCCTATAGC AGICTCTGCT
AATGCAAATT TCAATGTGTG CCCGCTTATT AGGIGACTTT T

### SEO ID NO:126: (Length of Sequence = 266 Nucleotides)

CTITIAATGA TGTGGTTCTG GTGGGATTTA TAAAGGGAGA TGGACCCCTG GNAAGATGCT TTCCIMAACC ACAACCCACA
CATTGGGTCA CCATTTCCTC TTCCTCCTCC TTCTGTGGGT GGCCGGAGAC CTGTAGGACC TTCCCTCCCT TTAGGGTTCT
GTAAGGCCCC TINTCAGTCC TCAGAGTCCA TTCTTCTCTT GTGCTGAGGG CCTGCAGTGG GGACCATATA CTTCTGGTGC
TCTTAGTTTG CTGTCGCGTC TGTTTT

### SEO ID NO:127: (Length of Sequence = 435 Nucleotides)

GICTOGITCT ATTCATTTIG TAGITGCGAG AAAAGGAATG AACCIGACT ATGGCAATTC ACCGTGACGI GIGATAATTT
AGITTGCIAT GAGITTTCAC TCTTAGGTAA AACCIAGITA TCCTAATTAA TAATTAGITA TGGATGATAT AGIAATTTIT
TTTTTTTTTTT ACTGCGTCTC ACTGTCATTC GGGCTGGAGT ACAGTGGCTG ATCACAGTTC GGTGCAGCCT CGACCTCCCT
GGGCTCAGTG ATTCTCCTGC CTCAGCTTCC CAAGTGGCTG GGGATTATGG GCATGCACCA TCAATGTCTG GCTAATGTTT
GGTGTTTT TTTATAAAGC CAAGGGTTTT GCCCATCNTT CAAGACCCCG GGGCTGGTCC TTGAACCTCT TTGGGGCTTC
AGGCAAGTCC TCCCACCTTC GGGCCTTCCC AAAGT

### SEO ID NO:128: (Length of Sequence = 471 Nucleotides)

TTCCCTTCCC AAGGACTCGA CCTGAGAACC GCCATGTACT CGGAGATCCA GAGGGAGGGG GCAGACATTG GGGGCCTGAT
GGCCCGGCCA GAATACAGAG AGTGGAATCC GGAGCTCATC AAGCCCAAGA AGCTGCTGAA CCCCGTGAAG GCTCCAGGA
GTCACCAGGA GCTCCACCGG GAGCTGCTCA TGAACCACAG AAGGGGCCTT GGTGTGGACA GCAAGCCAGA GCTGCAGGGT
GTCCTAGAGC ACCGCCGGG GAACCAGCTC ATCAAGAAGA AGAAGGAGGA GCTGGAAGAC AAAGCGGCTG CAGTGCCCCT
TTGAGCAGGA GCTGCTGAGA CGCCAGCAGA GGCTGAACCA GCTGGAAAAA CCACCAGAGA AGGAAGAGT TCACGCCCCC
GAGTTTATTA AGTCAAGGGA AACCTTCGGA GATTTCCACA CTGACCAGCG AGAGAGAGAG CTTTAGGGCC A

SEO ID NO:129: (Length of Sequence = 186 Nucleotides)

GCCTTTAACA TCCTCTGCCA ATRACTGGCC TCAAATCACC AGTGGAACCT TTTCAAAAAA TACACCATTG GCTCTATGTA
GTTCTACTGA TCTRAAATAT CCACGTGTGG GCCAGGAGCA CTGGCTCATG CCTGTAATCC CAGCATCTTG GGAGAGCGAG
GAAGGAGGAT CATTTRAGCC CAGGAG

## SEQ ID NO:130: (Length of Sequence = 307 Nucleotides)

ATAAAATACT TAGGAATATA CCTAACCAAG AAGGTGAAAA ACCTCTCCAA GGAAAACTAT GAAACACTGC TGAAAGAAAT CATAGACTAC ACAAATACAT TTCATGCTCA AGGATGGGTA GAATCAATAT TGTGAAAATG GCCATACTGC CAAAAGGGAT CTWCAAATTC AACGGTATCC CCATYAAATA CCACCATCMT TCTTTACAGG NTTCGGAAAA GGAATTCTAA AATTCATATG GGACCCAAGA CGGGGCCCGC ATAGCCCATG GCCGGCTTAG SEWAAAGGGA CAAATCTGGG AGGCCTT

### SEQ ID NO:131: (Length of Sequence = 184 > otides)

CCAGGITGGA TGGAGTGCAA TGGCACGATC TCGGCTCACT IN ACCTCCC AGGITCAAGC AATTATCCTG TCTCAGCCTC
CTGAGTAGCC GGGATTACAG GCACGTGCCA CCACACCCAG CCAATTTTTG TATTTTTAGT AGAGACGGGG TTTCACCGTG
TTAGCCAGGA TGGTCTCAAT CTCC

#### SEO ID NO:132: (Length of Sequence = 270 Nucleotides)

GENGGAGGGE GTOGAGGGCE AGGAGETATT CTACACGCCC GAAATGGETG ACCCCAAGTC AGAACIMITC GMENAGACAG CCAGGAGCAT TGAGAGCACC CTGGACGACC TCTTCCGGAA TTCAGACGTC AAGAAGGATT TCCGGAGTGT CCGCTTGCGG GACCTGGGGC CCGGCAAATC CTTCCGNNNC ATTGTGGATG TCCACTTTAA CCCCACCACA GCCTTCAGGG CACCCGACGT GGCCCGGGCC CTGCTCCGGT AGATCCAGGT

### SEO ID NO:133: (Length of Sequence = 529 Nucleotides)

CTIGCAGIAC ATAGCATIGI TATTACIGAT AGCITITATAA ATCIGCCAAA TAACATAGAA TGIAGCCICA AAAGGATGGI
CGAGGGITCG CAATCITTCT TTCICCACCC AGIGGIGIGG AGCAACICTG TGCCTTAAAG AGGCCACCAT GGAAAGAAAC
AAAAAGGAAT CTCTTTCAAA ATGCTGGAAA TTAGGCTTAG CTCACTACTT TCAGGATAAA GACAACIGCA TCTAATTAAG
TCCACTCCAC ATTTCITTGG ACTCTAAGIA TTCIGCACCT GAAGGCTAAA TTGAACTGGC TCAGCCCTAT CTTTTTTGCC
ACATCTTAA TTACAAATCT ATTTCITCTT CCTTTCATTT ACTTCICTTC TCTTAAGIAA GAAATGIGGG AAATGAGACT
GGCAGITTGG TTTGITTGCA TGIGGGGGIC CATTAGGCGT CTCATCCTAT GGCCCTTTTT GGAAATGITG CCTTCCTACT
ACACACCTGG GAGGITTCCC CAAGGCTCAA CCTTTTTGCT TCAGGIAAA

#### SEO ID NO:134: (Length of Sequence = 437 Nucleotides)

GACGGIGGG ACGCGIGCAC COGGGATGIG TCCTGCCACC AGAGGAGGIG TGCGIGGCGG GGAGCAGAGG GGCTITGITT
CCCAGGIGAA GGIGCGGCTI CITCACICIT AGAGGIGCGT GIGIGGGIGG GGGIGCTIGC TGITGAGGIT TATGCCTGTA
ACTGACAGCT GTCCCCCAAG CCATGCIGGC AGTGTGTAGG TGTCGIGCCG GCCACCGCAG AGGAATCCIC TGGGCTTCIG
TGGTTCAAGT GGGGCCCAGC GCAGAGCTCC ATGAGTIGCT GAGCAGCCAG CCCTTCAGCA TCTCCTGGGT TTTGGCAGCA
GGAGGCGTCC CCTTGIGCAA TTCAGGGGGC CGTGGGGGCT GGGGGGCACTC GTAGCAAGGT AAAGGAGCCC CTGCTCAGGC
CCTTGTTTGC TCCCCTTTCT TGCAAGAGGG GTAGACG

## SEQ ID NO:135: (Length of Sequence = 534 Nucleotides)

GGCATTGTTC TOGTGGGTGT GTCACGCTCC CAGAAGACTG AATTTATGGT AGGATCACTC GCAAGGCCTT GTGAAGGAGT
CTTACCTAAA ACAAAAGAAA TATCAGGGAC TTTTGTTGAC TATTTACAAC TCAGTTTTAC ATTTAAATTC AGGCAGTGTT
AATATGCCAA GGTAGGGAAT GTGCCTTTTT CAGAGTTGGC CAGGAGCTCC TGGCTGGGAC ACGGAGAGGC AGGTGTGGCG

TAAGGCCTCA CICCCGGCTG TGAAGGTCTC TGATCACACA GAAGCAGCCC TGCCCAGCCT GGGTCATTTG CTGTCCGCTT
TTCTCTGTGA CCACAAGCAG CCCTGAACAA CCAGTATGTG TCTTCTTTCT CCAGATAGTG AAAAAGGGTG TCCAGATAAA
CCCACCTAAG TGAAATGGGC CATCCTCTAA ACTGGGGTAC CTCACTGCAC AGGTTCTAGG TAGGCTTTCC ACTTAATCTA
ACTTGAGGCC TACAGGTACC CTGTAAAGTT AGTGGGGCTT GTCCTTGATT GTGG

SEO ID NO:136: (Length of Sequence =279 Nucleotides)

CAGTITIGEAC AAAGTAGCAT AGTGACTIIN TICCIACANI GACTITICGGA GAAGTINGCA GITTCIGGCA AAGTGACGCT
GGGCIGITTG AAAAAAGGCAA GCITAGCCCA GGCTGCCAIC TITAAAACATI TICGAGGCTGI AGCTTCCTCA GGATCCTTTG
CCTGTGGTCT GGTGGCCCGC AGTGCCCCGT CTAACAGCTT TITAACTCTGC ACTTAGTGCC TGAGCACCTA TGGCTGTGAG
AGATGCTAGA TACAGAACCC TGTCCTGTAC CACGTGGGG

SEO ID NO:137: (Length of Sequence = 518 Nucleotides)

CAAATATTIA ATGGAGATCT TCCTTGTTGG TCTGTTATAT GTCTATCCGT TTCTGGGTGG TTTAGGAGAA TCTGTACTAT
TTCAGCATGT CCTCCTCCAG CAGCAAAATG AAGAGGAGAA CTAAGTTGTC CATTTAAAAG GTTTGGATTG CACTTTCCTT
TCTCTAACAA TATGCGAGTG GCCTCAACTT TTCCATACCA GCATGCATAA TGAATGGGTG CCCAGTGGTC ACTATCTAAC
TGGTTGACTG AAAATCTTTC ACTGAGAAGA CGCCTTAGTA ATTCTGAATC TCCTTCACAG GCGCTTCGGT GGAGAGGAAA
ATCATCTACC CACTGTCGTT CCTTGTCTTC TGTGACACTG CTCATGCTTC TCTGCCAGTT TTTCCTGTTT AGGGTATTTG
GATTTTTGAG TAGTCTGGAG CTCCTAGACC CAAGTATGGA TTTATTACCC ACTTATCTAC CCGATTTGTA TACTGAGGAT
CCTATCCAAC AAAGGGTGTA AATCCAGGAT CCGCCTTC

SEO ID NO:138: (Length of Sequence = 266 Nucleotides)

GATTGCAGGC ATGANCCACT GOGCOCAGTC GAGTGGTAAT ATGTTMAAAG GAAACCTTT TCTGAGCAGG TCTCAAAAGA
GAGGTTAAAA TACTGAGTAG ACCATMCTGT AAACAGATGT MCTGTTATYC GGGCTTCAT ATTCCATTTA TAAAGCACAG
GCAGAGCTCA GAGTAGATTT AAYGTAACTC TGAAGGGCAC TAGGATTTTC AGAATGGTAA ATAAGCATTG GCTTCACCTT
AAATYCAAAT CTGCATTGGG CTTGTA

SEO ID NO:139: (Length of Sequence = 341 Mucleotides)

ACCTOGCTCA COCCTCTGAC CACCGACAGG CAGAGCAAAG GATGCGGGAG TIGCCTCTGC TGCCCATCTA AGGGGACGTA
GGCAGAGAAG CAAAGCCCTC TGCTCTCCCT CCATCCATCC CGGTGTGCTG GCCCCAACGG AACAGGAGTC CTTCAACTAT
TGCCTGCCAG AGACCCAATT TTAGGGACTG TAGTCTGCAT CTGGATGAGC TGGGCTGTAG ATTGAAGTCT CAGAAGCAGG
GAAAGGTTGGA AGGGGTAGGG TCCCAGAGCC CATGGAGTTA TTGCTGAGAA GATATGCAGG GGACACATTT CCCAGGGGCA
GAGTAGAAGC CCTGGGCCTT G

SEO ID NO:140: (Length of Sequence = 234 Nucleotides)

GIGAAGGGAG TIGCAGAATC AAAITGCTAC ATAGGCCAAA CAAAAAAGAA GGCTTTTTCA AAAAACATTA AATTCACATG CAGTCTCAGA GACTATTTAG GCAAAGTTCA AGTTAGGAGC TITTAGGATG TGGGANTAAA ACTTTAATKG GAGGGGAGGG CTTGCTTCTG GAGAAGGAAG AAGCCAGACT TGTTAGACAG TACTCTTAAC TCCTAGCCCA GCCTAGCGTG CCCT

SEO ID NO:141: (Length of Sequence = 354 Nucleotides)

CAACTCAGGI TAGCAACTGC AGGAAAACTT TCITCATTTT CACTGAATTT TAAAGAGAGA ATCCTGTCTC TATTTCTCAG
AGAAACTTAG GIGAAAAGTA AAAGAGAGGC AAAATCTCTT TCCITCATGA GATACTTTTA TTTTTATCTC TTTCTCTACT
CATGIGCTTA ACTGGIGAAA TGATTCTGTA GAAATAGATC CTTCTGATTC TGCATCTCAT TTCCTTATGG CAACTACAAC

AGGAGGAATC CAGCTGGAAA TGCCACTAAC CCCACATCCA GCACCTGAGA GAGGAAGCCA GTCGGAGCGC CGTGCTGGGC TCACTCACTC TGGGCCTGCG CACTGGGTT GTGG

### SEO ID NO:142: (Length of Sequence = 373 Nucleotides)

GITTITIGCAA CACTITITIT TIAAGITATI GOGIGCAAAA TOOCAAACCA GGATATGIGI AIGICIGIGI GITIAIGITI
TINATITGAC CCTCCCCTCI TICAACCIAC CCCCTITTAT AICIAAIGIA GAAAAAGCGA AAITGAATCI GGAAAGCAAA
CIGITGIATA TAGITGCOGI AACAATCAIG AAGAGAGAGC CCGCCIGICC AGITGITTIT GAGACAGAGI CICACTCIGI
TGCCCAGGCI GGAGIGCAGI AGCATGATCI TGGCCTCACTG CAACCTCCCC CTCCCTGGGI TIAGGCGATI CTCCTGCCTC
AGCCCTCCCA AAGIAGCTGG GATTACAGAC CCGTACCACC ACAACTGGGC TAA

### SEO ID NO:143: (Length of Sequence = 262 Nucleotides)

COCCACCICG GCCAGAGGGG GCTGCAGCAG CTGCTMCCTT TTCCCTGCCG CCGCCTCTCC AGTCCCTTTT TTAATTACCA
CTCCAMCTGC TGGGAACGGG CGAGAAAGAG GAGGAGGCGA GAAACTCCCA CCGACCCACA GAGGGAGCAT GATTTCGGCA
ACTTCACCTA TCATTCTGAA ATGGGACCCC AAAATTTTGG AAATCCGGAC GCTAACAGTG GAAAGGCTGT TGGAGCCACT
TGTTACACAG GTGACTACAC TT

### SEO ID NO:144: (Length of Sequence = 384 Nucleotides)

GEAAAAGCG GACCCAACA GIOGIGCIGG GGAAATTIIT CCCIGICCCC TITGGAAGGC TGAGIGGGIG ATGCAGCACA
GGAACAAGGC TIGGACGICA GAGGICTCAT CITCACIGIN ACAAAGCAIA AAGGACITGG GGITGAGCGI GIGINIGGGC
TCAAGIGACC AIGCAAGICC TGCCAAGACC CCCATCCITC TCCCAAGICC TCCACAAGAG CIACCTTCIT
CAAAACAAIA ACAGAAACAC AICAAGCTIG GGCGICACIG AATTCAAGIT CIGATTICIC CCGTCACCCC AGCAACAGIG
CCCAGIITGA TIGIGACACT TIGACCCAGC ACTTGGITTI GAATGTICIT TICGGCTTGI ACCG

## SEO ID NO:145: (Length of Sequence = 324 Nucleotides)

### SEO ID NO:146: (Length of Sequence = 355 Nucleotides)

TTTGCCTCCT TCCTTCCTTA TCCAAGCAAG GETGTGGTGA CAATGACCTG ATCGGGGTTT AACGCCGGCT CTGTCTGCTC
ACCAGACCTG GGGTGCTGAG CTCTGACCAG CCTGGGCAGC CCAACCCACA GGAACTGCGG TTTCATAGGCT GGGTCTTCAG
GAAGGGGTGG AGGCTTTGGG AGTGGCAGCT CCCCGCCTCC CACCACCCCA AGCCAGAGAA TGGGGCAAAC TTGTATGCAT
GGCTTATCTC TAAATTACTA ATCTGCTTCG GACCAGACTC ATCTCTACAG TATAGAGTTA GAGTTATTGC TTCTATGACA
GGTGTTCCAG AAGCCCTGGG TGGCTTTAAA GTCTG

# SEO ID NO:147: (Length of Sequence = 337 Nucleotides)

CAGTITICTE AGITCCCGTE TECTAGACTE GCCAGAAGAG AGGGTCTGGG GCCTGGTCAC TCGGCCACTC TCTCCTGTTT
CTGGCCTCTT CTCCCTTCAC TCCCGTCCAG TCTGGTTTTG AGAGCAGGGG CTGTTCTACA GCACCTCAGG GAAGGGAGGA
GAGATACCTG CTGCTTCCAT TGCTTTTCCC TTCCTGGAGT CGATGCCTTT CTAAGGGTTG GAGCTGCTCC TTGCAGGGGC

٠:

GGGTCAGTTT CCCAGGCCAT GCCGGGGGTG GCCATCTATG CTAGGGCTGG AAGCTGAGGC TGGCCGCCAA CTGTGGGGCT GGGGTGGGGG TGGGTGG

SEQ ID NO:148: (Length of Sequence = 278 Nucleotides)

GGAATCAGAT GCTCAGGTGT CCAAGCAGGG ATAAGGACAG GCAAAATAAA TAACCCGCCC AACCCCCATC GTCACTCTGC
TGCAACACGA CACAAAGGTT TAAAGATCTG GGCCCAAAGA CTCTGGGACC CTTCAAGCAA GTCAGGTGGA AGAAGGTTTC
CCCACCCCCC ACCAGGCCTG TTTGTCCCAG GTTGCCCTAG GATGGAGGCA GTTCAGACCC TGGGTCACTG ATGCTTGATA
GGAAGATCTT TGATATCAAT GGCCTAAGCT CTGCTCAT

SEO ID NO:149: (Length of Sequence = 368 Nucleotides)

TITITITITI GITTCAACA AACITTACTA AATAACCCIG GAAAGGCAAT GAACGATCIG ACAATITAAG CICTAATGAT
TTAAAGCICA GCTAGAAGAA AGIGAGGCAT GACATATACT GICAACGGAG GGIGAAGGAG GCAGATITCI GGAAATGCAA
TGATCCCACA CATITGCTIC AAGGAGAAAC CIGCAGACAT ATTITCAGGI CITGCTAAGI AACAACIGIT TATITGTAAT
CAATACATTI GGGGAAAGIC TGCTATGTAG CTAAGGICAC TGIGACCACA GACCAACAGA TGGAAAGGAA AAAGGCACIG
GACCAGCAAG GAAAAATACA TCCCCATCCT CAAAAGAATT TTAAGGIG

SEQ ID NO:150: (Length of Sequence = 367 Nucleotides)

TTGTGAAATG GGCCTGGGTA GATAAGGAAA AGAACCTCCA AGAGGTTAAG TGATTTGCGG ATTTGCCTAA ATTATACAGA
AGAGTCAGCA CCAGTGCCCA GGCCTTCTGA TTCTTAGTGC AGTAAACACT AAGCACCATC ATTCCATTTC ACCACACTCC
TGTCTTGCTG TTGTCCTCAG CTAAGAAAGC CTACCCCTGA GTTACCCTCT TCCATCTTAG AGCCTTCCTG CTCGCTGTCT
GCCCCCCTGC GATGGGGACT TCTTTGGCCC TTCTCACCCA GCCCAGCCTC TGCCCGTTTT CCTTCTCCTT TCCACTGCGG
CTGAGCTCTT TTCTCCTTCC GAGAAGCCTT TCCTTCATCT TTCCTGG

SEQ\_ID\_NO:151: (Length of Sequence = 366 Nucleotides)

CCCAGCGGGC CGCCTCCCTC CTCTCTCCTC CATAGGTGGG GGTTGTGGGC CTTCTTTTT TTTTTGTCTT GGAGGGCAGT
TAAACTTCTC CATTTGCCTC TCTCTTCACA CCCAAATGCC AAAGGACACT TTTCCTTTCT TTTGTGGGTA GTTGCAAAAA
AAAAAAATTC CTATGGGTTA CTGCCACTTT TAAATACTTT GTAACTTAAA GGCAAAGTAG TATGTCACTG TTTCTTTTCC
CTGTAGTTTA CTTTTGAGGT TAAACATCTT TCCATGTCTT TATTGGTCAA ATACAGTTCC TYCTTTTGTA CAATGTTAAT
CCTAATATGG ACCATTTTTC CTAATGGGAT TACCGATTTT TTTAAA

SEO ID NO:152: (Length of Sequence = 269 Nucleotides)

GITATICIGE CAAGIGCTIT CAGGGCCCTC CAGGGTTIGG CTGGICACCA TGGAGGGGGG GITCAGGIGC TGAATTIAGG
GACCCCAGCA TCTCACAGGT TTCCCCTTCC ATCITTCCCA GIGGCACIGT GICTGAGCAG GIGIGCCCAG GIGAGGTIGT
ATCCACTGIG TCTGAGCAGG TGIGCCCAGG TGAGGTTGIA TCCACTGIGT GIGAGCAGGT GIGGCTGITG CAGGTGGAAG
TGGGGATAIN TGGGCACCTG GGIGCCATT

SEO ID NO:153: (Length of Sequence = 260 Nucleotides)

TITCAGGATI TITATTIAAAA TITATTITAA TGGGGTCCGC GCAAAAGGAA GGGGTGGAGG GTGGGTACA TGCAGGGGAC
ACAGGAACAN GATCCACATG GCCAGGGNCA CAACTTCTTC TGTCGTGGGG AAGAGGGATG AAAAGACAAG ACCAGGGCTA
NGAGCTGGGG TGGAAGAGGG GAGGGGNAAC ACTGGCTGCA TTCCCCNAAC CCCANGANGC ACCTATAGGC CCTGGACCCA
TGGGTCACCC TGGGCCCTAG

SEQ ID NO:154: (Length of Sequence = 405 Nucleotides)

TEGRACITET GAGTEGEGAC CCATGATGTA TEGGTCTCAC CTGACTTGAG GTGAATTTTG GAGTGAAGGG CCCTGAGGTC
AGCTCCCAGG TCGGTCGTGC TEGGCCAGGC CTGGTTTTCA CAGGGGCTGA AGGATCCCAG TCCACCTGTG TGCATGTCAG
GGCTCGGCCG GGAAGAAGCC AGCAAAGTCC CCCGTGTCCC TTGCTGAGTA TTCTGTCACA GACAAGCCTC CATTAAAGCC
ACAGCAGTGC TACCCACCAC ACACACCTTG CTGGCCCGGC CACCACTGCT GGCTTCAGCC CCTTNAGCAG CCCATGGNTT
AGCAGACCCT CAGATGTAGG TCAGTGGCCT TANCTGTNTC TATCCATGCT GTTAAACTCC CTGCCTCCAA CTGGGGGTCA
CCAGT

SEQ ID NO:155: (Length of Sequence =: 40 Nucleotides)

CCATGATCTT ATTTATTACA TCTAGITTIT CITTATACCT CTAAAAAAAA GIGCCTTTTA GATTTACAGC TIGIGCTTCT
AAAGCAAAGG TTAAAACATC ATGCCCCAAA GGAAAACAAG GTAAAAAGGA AGCTGCCATA TAAGCTCTTA AAANITGTAT
GTTACAAGGT TCTAAAATCT CTTCAGCACT GGTTGGTTGG TAGATTGTAC GACACTGACA TGGTGCTTGG GACGGTCATT
TATCTGATGG TTGGAGCAGC ACCATGGGAA AGCTGCCCAG ATGGTCTACT GAAGTCCTTG GCTGTGCACA GAATGGGCCC
AAGGGCCAGN AATTCATGAG TCCGGGGAAC TTTGGAGGTC CTTACTCAAT CTCCTTAGTG CTAAAGNITC AGAGTCTCAA

SEQ ID NO:156: (Length of Sequence = 443 Nucleotides)

GTCCTCTGGA TTGCTTCGTT GGTTGCGAAC TITAAGAATG GCAAACTGTG ATTGGNTCCG ATTAAGACAA GCTTTGTAGT
TTTCTTCGTG TAAACACCAA ATCCCGCCTG GGCCATGAGG TAGCAGAAGT GGGCCGCATC CAAGAGGCCC CTTGAAGCCA
GAGTGTCGCC CATGGTAGCC ATCGTCCTGG ACTCGACGTC CATGTTGTTG TTCAAGTTGG ACAAGACCAT GGCGAGGTGC
GGCCTCCAAT CTCCCCATTT CTCGTCTCCA CAGCACGTGG ACGCGGCAGG CATCCGTCCG GACATGAGCT GGTAGACTGT
CTTCAGAGGG TCGTTGATTK GGGAGGCTTT TTAGCAAAACC TKGGTCATGA CTCGGGCGTG TGTCCGGCTG TTCCATCTTA
CTTGCAAGTA GCAGAGCGTG ACCCCACAAG GCCATTCTTA ATT

SEQ ID NO:157: (Length of Sequence = 383 Nucleotides)

ATTGGAAAGG GTTTTAAACG GAGTCGGAAC CTGAGTAGAT TTCCAAATTT TACAGCCAGG ACTACAGAAG TGCATCATTC
TAGAATGTGT AGACCTGAGT AGCTTATACA CTACAGAGCA CTTTGCTTAT TTGAAAGTAA TTCAGCAACA GGTCACTTTG
GGATATAACC TGAACCTTTT TTTGGAGTGG GGTGGGTAGA CTACAGTAGA CACAAGGGCT GGACATGCAG ATGCTTAGGG
GATTAGCGTT TTTCATAATT TGTTCTGTTT GTCAGTTCAT TCCTGTGTGT TCTTACCTCT ACAAAGGTAC ATTACACATT
TTARGTTTTT TAGTGACCTT TAACCATGTT ACTTGAAGCA TTTTGGAATA TAAAGCTATT TTA

SEO ID NO:158: (Length of Sequence = 241 Nucleotides)

TEGISTETEG CTCAGCTECA GCEGCASGIA AGTEGGTSTC CAGGGGAGTE GACAAGCAAT TCTCCTETCA TTTGCAACTT
TCTTCAGGAA CTCAGATAAA GAACACTTEG ATAACGATGA TCCCTETAGA GGGATTTCAT CTGTACCATC ACACATEGAA
GAGGAGTTTC TAGGTCAGGA AAGGCAGCIN CTAAGCTAAA GGTTTCTTEG TCCCTINGTC CTGGCATGCC TTAAGGAGGG
G

SEO ID NO:159: (Length of Sequence = 224 Nucleotides)

CTGTCAGTAA TGGCTCACTA AAGGGCCAGC AGTTTAAATT ACACAGGTTG CACTAAAAGC TGCAGCTTTG GCCAGGCAAG GTGGATCACG CCTATAATCC CAACACTTTG GGAGGCCGAG GCCGCAAAT CACCTGAGGT CAGGAGTTCA AGACCAGCCT GGCCAATATG GTGAAACCTA AGCCTCTACT AAAATTACAG AAATTAGCCG GTCGTGGTGG CACA

SEQ ID NO:160: (Length of Sequence = 377 Nucleotides)

GGAGGCTGAG GCGGGCGGAT CACGAGGTTA GGAGATGGAG ACCATCCTGG CTAACACAGT GAAACCCTGT CTGTACTAAA
GATACAGAAA ACTGGCCGGG CGTGGTGGTG GGTGCCTGTA GTCCCAGCTA CTTGGGAACT CGGGGGGCTG AGGCAGGAGA
ATGACCTGAA CCCGGGGAGGC GGAGCTTGCA GTGAGCAGAG ATTGCGCCAT TGCACTCCAG CCTGGGCGAC AGAGTAAGAC
TGTCTCCAAA AAAAAAAAA ATAATAATCA AAGCTCTTGG ATTTATAGTT TGGTCCCCAG CCTTGTTTTG ATCTTTCCTT
TATCCTGTTT TATTGCCATT TACCACGTCC TTTTGGAAAC ATCCCTTTCA ACTGCTG

SEQ ID NO:161: (Length of Sequence = 273 Nucleotides)

GCAGOGGCC CGGGCGAGGA GGCGGCAGGG GCGAGGAGGG GGCGGCGGGT GGCGACCCGC AGGAGGCCAA GCCCCAGGAG GCCGCTGTCG CGCCAGAGAA GCCGCCCCC AGCGACGAGA CCAAGGCCCC CGAGGAGCCC AGCAAGGTGG AGGAGAAAAA GGCCGAGGAG GCCGTGGCCA GCTCCGCGCT GCTAGGCCCC CTTCGCGCGG GCCCGGCGCG CCCCCGGAGC AAGGAGGCAG CCCCCGCGGA GGAGCCCGCG GNCGCCGCAG ACT

SEO ID NO:162: (Length of Sequence = 286 Nucleotides)

TTTTGGTCAA ATAAATCAGA GTACTACAAT CATCAAACAT CTGATTCATT TAACATGTGA GCATCTATAC CTGCCCATTT
GTGTGAATAT TCAGTATATA TCTCATACCT ATTCTCATGC CTTCATTTAT TGTGGTTATG GCTGTAGATA TGGAAAAAAC
AGTAGCTGAG ACATTTTTAT TATGAACTAT ATTATACCTT AATCAATCAG TCAGAAAATG CTTAGGAAGA AGAAATGCAT
GATTGTAAAT GCATGATTTC AACATGCTAC CCGGCCAACA AAGTTG

SEQ ID NO:163: (Length of Sequence = 342 Nucleotides)

TECCCAAGGA AGACAGAACA TEGAGAACCG TCAAGGCAGG AACCCCACAG ACTGTCCCTT CCAGCCCACA CTCTGCCACC
TCCTGGCCCT GTCCCAATTC TGAGCCAAGG CCTCCCCGAG GCAGAAGTTG CCTGGTCCTC TGTCCCCACA GTGACCTGAC
TGGGGGTGAG GGAGAAGGAG GAGAGAGCCC ATGTGTGGTG TGTGTGCCCC TGAGAACTTC GTGGTGACTG CCTTTGGGAG
CCCGCAAGGTG GCCAGAGGCA GGGGTAGCTG AGTTCCTGGG AGACCCCTTT TTTTCCCCCA RGTTCCCCAG AGGGCAACGC
CATCAGTAGC AGTGTGGTGT TT

SEQ ID NO:164: (Length of Sequence = 392 Nucleotides)

ATTACCEGEG CCCCECCTCC CTAAAACAGA TCTACEGACC TTAACCEACG CCATECTEAG GCTCATTCCA TCCCTGCRGA
CGTATGCAGA GCCGCTCACT GCTGCCATGG TGGAGTTCTA CACCATGTTA GGAGGAATTC ACCCAGGATA CACAACCTCA
CTATATCTAT TCACCCCGTG AAATGACTAG GTGGGTGAGA GGCATCTTTG AAGCGCTGAG ACCTCTGGAG ACCCTGCCTG
TTGAAGGCCT CCTTCGGATT TGGGCACATG AAGCTCTGCG TCTCTTCCCCA GATAGACTCG TAGGGGATGA GGAGAGGCGT
TGGGACTGAA TGAGAAGATC GACACGGTTG CTCTTGAAGG CACTTTCCCT AACCTTCGCC AGAGAGGAGG GC

SEQ ID NO:165: (Length of Sequence = 406 Nucleotides)

GETTATAATTA TCTTGTTTTA TTATTTATTG TTTATCICIT ACTGTGTATA ATGTAGAAAT TAAACTTTAC CATAGGTATA
TACATATTGG AAAAAGCATC TTATATACAG GGTTTGTTAC TATCTGTGGT TTCAGGCATC CACTGGGGGT CTTGGAACAT
ATCCCTTGCA GATAAGAGGG AACTGCTGTA TCCATAGAAT AAAAACACCC CATCTTGAAG ATAGGAGGTT CTGTAAATTG
GGATGGGGTC AGGGAATCTG AATTTTAAAA GTTTCCCATG TGATTTGATG CCCAGCCAAG GGCTGGGGAC CACTGTCTTG
AAATATAATG CTGAGGAAGA TACTGTCTTT GGATTTTCCT GGTAATTCCG AGTGCAAATT CTCAGGCTGG AACCTTATGG
GCCTTG

SEQ ID NO:166: (Length of Sequence = 453 Nucleotides)

GAAAACTTIG CCAIGOGICA GITTIATIGG AAGITCATIT TCCIGAATGI TIGGAAGAAA GICIAGIGAC TCAGGATAGC
ATTICIAAIT TCACAGAGIT ATTITICCGI TATGAAACAC AGATIGCCIT TGAGGICICC TGITICIACT ACTGCCCCIC
ACTITIATGI GGGCCICCIC TITICCITIGI TICIGGAGAA CCITITCCIG TICAATICIG TITIAATTIT CAGCAGITIT
TTITICIGIGI GAGIGAGGCI GITICCIAGC AGGGAGGICI GGIIGGICAT TITICAAGIIC ATCAGGGCIT CATCAGGGCI
TGICCACTIC AACCCITACG CIATAGGNCC CINIGCACCA TCIGCANICI TCAAAATGIG CCCACIGGIT CGITCCCATG
GANGGCTIGI TGGTAAITTIG GGCTITITAGG GGGGCCCCATG GAAGGAGCAA ATC

#### SEO ID NO:167: (Length of Sequence = 285 Nucleotides)

TTTACTCTTA AAACTGITAC AACAGAATCA TOGACTGACA CAGGIAATGG CTGAGCCATA AGCAAATCGA GAAGTACAGA AATGTCCCAC CCCAAACAGC TGCGGAGTAC ACATCACACA GGGCCTCTGG TCCCGGCCTT CTCAGGTGCT CTGGAGTGGA GGATCCTTTG AGGGAACTCT GACCACTCCT GTTGTCTACC TAGAGAGGAC GCCACTTGGG CCACCTACCC CCAACCTTTG GCCAAAGGAG TGAAAGGAC TGGAACCTGT CGTCAACCTC AGCAT

#### SEO ID NO:168: (Length of Sequence = 327 Nucleotides)

CTAGAGGGCA CTCTGTATAC CCGTCAGCTC CTGGAGCCAT TCATTCTATG CTGGGCAGAC AGGCTGTGAG AGGACATGGG
GGACGGTGGA AAGGNICCAA AGACGAAGCT GTNGTTTATC CTTGTTGGTT TTACACAGGG AATGATGAAA CATTGAAGGG
GTTTAATAAG CTTTTCCTAA AACATTTTCC CCCTAAACAG GCTGGCACTA TGTCGAAGCT GCCCAAATTT GAGATTGATT
TACCAGCTGC GNCTAAGTCA ACTAAACCCA NGCCTTTCCG AAAGAGACAT CGCAANTGGC TTACCCAANG TANTGTCCCG
TTTTCAG

#### SEO ID NO:169: (Length of Sequence = 346 Nucleotides)

GETGCTATGG AGAGCCGGCC GTCCTCCAGG GETGAGCTGG GGAGGCTTCT GCGETTCTGG AGTCCCGGCG ATGGCGCCAG
TTCCCCAGCA AACCCCCTCC AGAGCTGCCC CCGGATGCAC AGACAAAGGAG GGGGCTTGGG AGTGACTTGA GGCTGTGACG
GGRTCGCCCT CGGTGTGGGC AAGTGAGTCC TCTGTGGCCA AGAGGTCAGA GTCGTCCCTG AGGCTGAGTC GAACACAGAC
CCGTGGCCCCT CATAAAATTA AACATAAAAG CACAAAAAATG GGCGCAACCA GACAGCATTG GCTTTCAGAC AGGCAGGGAC
ACGGGGGCCC CTTCGTGTTG ACCTGT

## SEQ ID NO:170: (Length of Sequence = 398 Nucleotides)

TTGACCTCAA CTTACTGAGC AATGCCGTAG CTATGGAATA GAAGCATTIG TTGCACTCTT TTTGTGAGCC AGGCCCTGTA
GGAGGGATTG TGGATGGCAA AACCTCAGGT TCTGCCCCAAA TCCTCCCCTT GGGGGCTGGA GGGTCTCTAG TTAATTGGCA
TTCCGGTGCT TAAGGCCACT TTTGGGTAGA GGTTGGCCAA GGATGGAGTG TCCAGACCTA TGATCCTCTA AGAACTTTAC
CTTTTAAAAA CAGCCACCCA AATGGTGGTG GCGTGGGGAG CAGGTGGTGG TGAAGGGACT GGGGGTGTCT GGCCATKGCC
ACGTACCAGA GGAGACTCTG TGAGCCCTCT CCCTGCCTGA GGGACACTTA ACTTTTATAG CACTACATAG GGTCAACG

#### SEO ID NO:171: (Length of Sequence = 321 Nucleotides)

AGACAGCATC TGGCTCTGTC ACCCAGGCTG GAGTGCAGTG GCGCAATCTC GGTTCACTGC AACCTCTGCC TTCCAGGTTC
AAGTGATTCT CCTGCCTCAG CCTCCCAAAT AGCTGGGATT ACAGGCATGT GCCACCATAC CCAGCTAATT TTTGTATTTT
CAGCAGAGAC GGGTTTCAC CATGTTGGCC AGACTGGTCT CGAACTTCTG ACCTCAAATG ATCTGCCCAT CTAGGCCTCC
AAAAGTGCTG GGATTATAGG TGTGAGCCAC TGCGCCTGGC CCTTGGGTAA ACACTTCAAA TGCAMCCAAC CATTAAAGGT
A

SEO ID NO:172: (Length of Sequence = 293 Nucleotides)

11.

GAAACITATA GICTIGCCIC CCAACCITCI GAACACTCCA GIAGAAAAAT CITCICGCCT ACCITTATCA CCCCACGACC
TACIAGCATI TCITACICIC AAAAAAAATC TITTCIGAAA AATCAAGACA GAGIGCAAAC AATCAGCATA ATTTIATTAT
GACARAACIT TIAAATITTA TCCCCCTCIC TGAGAGKICI GCIAGGACIC CITCAGATAA GIGAAAAAGA AAKTITTIAA
AATTIATICI CAAATCCGAA TTCCAATCIG TATAAAAAGG GCGATICICC CTC

#### SEO ID NO:173: (Length of Sequence = 282 Nucleotides)

GCTTGGTCCC GITCCTCAGG AAAAGGATGG ACCITCTCTT CITCTCAGAT GGTCCCTTCC ATTCCCCTGA AACCTGCATG
AGAGCTCCTA ACATGTTTCT CCAATGCAAT CAAGCCTAGA CTCCAAATGT CCTCCCAGCT CACCTCCATC TATGCATCTC
ATCCTGGAT TIGGTGATCA GACTCTATAT TGACAGTAGG ATCTCAAACC CTGCATCCAT CCTTCCTCCA GCAAGCCCTG
CTAGCCACAT GAGGAACAAG TTTCCGTGTC TTCATGACTT CC

#### SEQ ID NO:174: (Length of Sequence = 353 Nucleotides)

CAAGAGGTAGG GAGAGGTAGG GGGCAACTAC AGCTCCCCAC CAGCCCCACC AGGGGGAATG GACCCCTCCC TGCCTCCTGC
CCAAGTGGCT CCCCCTGTAT TATGGGGGGG ACTTTGTGCA AACTCTGCCC CGAGGGGGTG GGGAGGGTGG AGGGTGAGTG
TGAAATGGCA GCGGTTGGGG CTGGCAGCTG TGCTACTGGG CACTGGGGGG CTTGTAGGGC TCCAGGAGGA GGGCCGAGAA
GGTGTTGACC TTGTCTGCCC CCCGCACCTC ATGGGGTAAC AGCGGCAMIT TCACGATGTG GAAGTTCTTC ATACAGGTCC
TCCAATCTGG TCCAGATACT TGGCCTGGGT TCT

#### SEO ID NO:175: (Length of Sequence = 394 Nucleotides)

GCCCATGCCC TIGIGIACAT AATCICIAAT ATTIATATAT ATTGATATAG AATTCICTCT ATAATATATG TCATAGAATC
TCTCTTGGGC CTGGCGTGGG AATGIGACAT TAAGAAAACA TGCTAAGACT GGCCAGAAAA ATGGATATTT CCCAGACCTG
GAGGATGGTG TGTGGGATGT ATAGGTGAGG TCGTGGAGAA GATAATAAAC TCATTCCCCA AGATACCCTC TTCAACACAA
GGACAAGAAG GAAGGTGTGT GGTGGGGGAG GGGACAATGG AGGGGGAGGA GTGGAAGATT TGGATTTTCA TTITAATAAAG
TCAATTGAAA AATGAAAGTG CACCCCCCCT CCAAAAAACA GGAGATTCAT TTAGCAAGAG CCGTTTCATT CACA

### SEO ID NO:177: (Length of Sequence = 381 Nucleotides)

ATTGGGACGG GCCCCCTCT GAGGGACGG ATCGATAAGC TTGATATCGA ATTCCTTGAT NITTTCTAGT GFTATGGTTT
TCTCCCACTC CAATAACTWT TCATACCTKT GGTCTKAGTT TTTCCATCTA TAAAATCATG TGCTAAATAA TTAACTATCA
TCTCTATCAT TGTCAGACTA CACAAAGCTT CCAGCCTGGG CAACAGGAAC CCTGTCTCTA AAAAAAATAC AAACATTAGC
CAGGTGTGGT GGTATGCGCC TGTATTCCCA GCTACTTGGG AGGCTGAGGT GGTAGGACTA CTTGGGCTTT AGAGGTCAAG
GCTGCAAGTG AGCTGTGATT GCGCCACTGC ACTCCAGCCT GGGCAACAGG GCAAGACCCT G

## SEO ID NO:178: (Length of Sequence = 443 Nucleotides)

GATITIATIC AAACACAGGC AAGAACAATG ACCITCAGAG CIGGGIAAAA AIAATAAGIT AAAAGCATGG TIAGAATITI
AGACAATCAG AIAAAAAGIT IGAAGGAAGI GATITCCCCI TCCICICCIA AITGAITAAT TCAACACAGC AIAAAAATAA
TITGIATCIA IAAAATATCC TIGITCCCAC ACAAATGAAC IGGAGGIGGC CCIAGGAITT CCITGACIAT GCACAATGCA
CACAATCIAC AIGICCCICC TCCCCAACIT TIAAGGCAAA AAIGGICCIG CATCITCAGG CAGAGGGIGG GCICAIGCCA
GCAGICAGCI GIGGICCAGG ACACIGGGG IGCGITTYCI CCACCGAAAG AIGCCIGCIT IGGGICCACT TIGGGCGCGG
GATCCCATIT IATITICIAG CCIGIGCCIC ACCACAGGGA AAA

SEQ ID NO:179: (Length of Sequence = 325 Nucleotides)

TEGGGGACCA GCATTGCTCC CAGCTGAGGG CGCCGTCTTC CTCACCACGT ACCGGGTCAT CTTCACGGG ATGCCCACGG
ACCCCCTGGT TGGGGAGCAG GTGGTGGTCC GCTCCTTCCC GGTGGCTGCG CTGACCAAGG AGAAGCGCAT CAMCKTCCAG
ACCCCTGTGG ACCAGCTCTT GCAGGACGGG CTCCAGCTGC GCTCCTGCAC ATTCCAGCTG CTGAAAATGG CCTTTGACGA
GGAGGTGGGG TCTTACAGCG CCGAGCTCTT TCCGTAAGCA GCTGCATAAG CTGCGGNTAC CCGCCGGACA ATCATGGCCA
ACTTT

### SEO ID NO:180: (Length of Sequence = 213 Nucleotides)

GAGCATGCCC CCGGAGTCCC CAAGATCCTG GTGGGGAACC GCCTGCACCT GGCGTTCAAG CGGCAGGTGC CCACGGAGCA GGCCCAGGCC TACGCCGAGC GCCTGGNCGT GACCTTTTTT TAGGTCAGCC CTCTTTGCAA TTTCAACATC ACAGAGTCGT TCACGGAGCT GGCCAGGTTC GTNCTGCTGC GGCATGGGAT GGACCGGCTC TTG

### SEO ID NO:181: (Length of Sequence = 219 Nucleotides)

AGCITIATCA CATTATACAC AAACATAGAA AACAGIGITT CAGAAGAGAA GCAAAGGCCA TIGGCITCAA ATATITATGC
AACAATGAAA ATGITCTCAG CCCTTAAATG AGCACITGIG ACTIGICCAA CAGIGAGATA ACTAGICAAT GGAAGAGITC
AACACTAGAG CATGITCTC AGTCTGITCT CATATTGCTA TAAAGGGCTS CCTCAGACT

### SEO ID NO:182: (Length of Sequence = 451 Nucleotides)

GICTIACICI GITACCCAGG CIGGAATGCA GIGGIGIGAT CATAGCICAT IGCAACCICI GCCCICTAGG CICAAGIGAT CCICCCACCI CAGCCICCG AGIAGCIGGG ACIACACGIA CATGCCACCA IGCCCAGCIA ATITITGIAT TITIGGIAGA GACGGGGIITI IGCCATGIIG ACIAGGCIGG TCITGAACIC GIGAGCICAA GIGATCIGCC IGCCTCGGCC ICCCAAAGIG CIGGGAATAC AAGCGIGAGI CATGGIGCCI GGCCIAGIITI GCICTIATIT TITITCCATC TITIGCAGIITI CIAGGCCACT GGGAACAGGC IGCAGAGCIC AGAGICCACA GCIGIGAGGC ICCATGIIGC ACCATCAAAA AATAAGGIGA CGAGAGICCT GGGITTCCCCA GIGICACGGC AAGAGGGGIT ACIGCTCACG GGIACACACA G

## SEO ID NO:183: (Length of Sequence = 444 Nucleotides)

CCATGAGGA GCACTICCAA GCAGAGTITG AGGCTCAGCA CCGA

#### SEQ ID NO:184: (Length of Sequence = 399 Nucleotides)

GECAGAAAGA GGAAGGAGAC AGTGCCAGGA GGAAGAAGGA AGGAGTCCCT TAGCTCTCTT CATTGTCCCC TTTACTTCCT
GCTATCTTCT TCTCCTCTTC TTCTCTCTCT TGCCINTATG CCTGTATTTC TGGCAATATG ACAGGCCTGC CTACCCAAGA
TCAGAACTCC AAAACCACTC CCACCCCTGA AGGTCGGGAG GGTCTTAGCA GCCCTGGGTG GCTGCCTGTG CTCAGGTCCT
CAGCTCCATG GGAAATAAAA ATGGCACCCT GAATCTCTAG GATTTTGTCA CTTTGGAGTC ACAGCAAAGT TCTCTTCCTC
TTGTCCCCCC GTTTGCTGCT CCTTGGGTTA TAGGACATGG TAAATATTTA TTACTTTCAG GGAACCAGTA TTTTATTAG

## SEQ ID NO:185: (Length of Sequence = 263 Nucleotides)

CAGAGACACT GGCCCAGCTA TTTTCAGCAG GGACAGAGTC GAGGCTCACT GGGGATGGCT TCAGAGGACA CTGAGGCCCC
TCTCAGGGAG GGCAAGGCAC AGATACCCCA AATTCCACCC CACGTCCCAA AGGTCTCCCA GCGGGGCTGT CCAGTCCATG

٠ ووم

TCAGCAGAAG GCTCTTGGGC GTGTGAGGGA GGGTCTTGGA GAACTAAGCG AAGGAGGCAA ACGCCAGGGC CCCTTGCAGGCACC ATGTGCACCA CTT

SEO ID NO:186: (Length of Sequence = 343 Nucleotides)

GITCCAATAG CIGGITTIAT TCICAGCACA AAAGGGCCCI GIGIAAAAAC CAGAAGGAIT TIGIAAAATA TCAAAATGAA
TATITGGCCI GGAGGITGGA AAGIGAAGCA AGGCTGGACA TAGAAAAAAA CIGATCAGIA GITAITCAGG ATATITATITA
GGATAAATGA AATAGGAACI TAGGGGCATC TCITACITTI CIACAGGIIC TTATCIGGGI CAATGAAGAA ATIGIGIITA
TCITGCTGCC CITGCATCAG GITITITGCA CTAATGGAAA AAAGCCGGCC GAAAAACAAA ACCCAATCCI TTCAGICCTA
GCITTTACAT CITGCCCTIG CAA

SEO ID NO:187: (Length of Sequence = 229 Nucleotides)

GGTGCGGCTC CACCCCTTCC ACGTCATCCG CATCAACAAG ATGTTGTCCT GTGCTGGGGC TGACAGGCTN CAAACAGGCA TGCGAGGTGC CTTTGGAAAG CCCCAGGGCA CTGTGGCCAG GGTTCACATT GGCCAAGTTA TCATGTCCAT CCGCACCAAG CTGCAGAACA AGGAGCATGT GATTGAGGCC CTGCGCAGGG

SEQ ID NO:188: (Length of Sequence = 284 Nucleotides)

CCAGCAACTC AAATTCACCA CCTCGGACTC CTGCGACCGC ATCAAAGACG AATTTCAGCT ACTGCAAGCT CAGTACCACA
GCCTCAAGCT CGAWTGINAC AAGTTGGCCA GTGAGAAGTC AGAGATGCAG CKTCACTATK TGATGTACTA CGAGAKGTCC
TACGGCTTGA CCATCGAGAT GCACAAACAG GCTGAGACCG TCAAAAGGCT GACGGGATTT GTGCCCAGGT CCTGCCCTAC
CTTTCCCAAG GAGCACCAGC AGCAGGTTTT TGGGGGCCCAT TGAG

SEO ID NO:189: (Length of Sequence = 215 Nucleotides)

GGAAGGATGA GAAACAGATT TCTGCTCACT TCATGGGCTG RCCTRGRATT GAAGGATGGTR CAAACCCAAG ATTATCCTCA TGTAATTTAT GAAGATTATG GAACTGCAGC GCATGACATC GGGGACACCA CGAACAGAAG TAATGCAATC CCTTCCACAG ACGTCACTGA TACAACCGGT CGGGCACATC TCKCGGCCTA TGCTGCCGGT GGTGC

SEO ID NO:190: (Length of Sequence = 153 Nucleotides)

TITCATATEG AAAGAGCTAG TACAATCACA TATTTGAAAG GAGAAACAAT AGGTACTGAA CCGGAGGGAA AGGGCGAGGG TGAGTGTGCC AGCACCGGCC TGGTGAATCC ACGATTCGGT TTCCCATCCA AGGGTAAGTT TCCCAAAATA CCG

SEO ID NO:191: (Length of Sequence = 316 Nucleotides)

GIATTIATAC ATTIATTIAT ATATGIATAT TIACTICAGA NGAAACGAAC ATTICGGGGA CAGGAAGCAA GCAGGCCCGG GGCIGCTICC CICACIGCCC ACCICAGAGT CAGAGITGGC ACATGACAAA TACCAAGCIC AGGGIGAAGA ACTGGGAGIT AACIGGGAAG TAGGGKGCGC TCTATGCACA CGCAGGCTIC TAAGGGTGCA CGCTATGGGC AGKKGGTITG CACTGGGAGG CCCIATGIAC AGCTTGAAAG CTAGGGGTGA GATTAGCCCA GTGACTACAG GAACATACGT CAAAGTTGAG AGAAGA

SEO ID NO:192: (Length of Sequence = 360 Nucleotides)

GIGGITITIG GITATATGCA GCITITGACT AGCATGIATI GIGICITITI CICCICIATG AATAATITTA TATITCATGC
TACTICITGA AAGITTACIC TITGATGCIC TAAGAGAACA GCCAGATGGI TITATATGAAT AANCITITATC TGCAGGATGG
TGGATTGGIA AATNAGGAGA ATGITGITTG AGATATCAAG ATTTATGICT GGGAACTAAA ATATATAATG CCAAATGIGT
TITTIGICAAT TACTAGAGAA TICTGIGCAA ACATATCATC TCTTCACATG CIGCACACTT TGCTTTTTGT TAAACAGCAG
GIAGIAGACA GACCAATACC AGITTCGCGT TAAGG

SEO ID NO:193: (Length of Sequence = 397 Nucleotides)

GAAAAGACCA AGGAGATGGT GAAGACAGCA GAAGCCCAGA AGCAGCAACT GAAGGAGGAG CAGGGGAGGT CAGCAAGGAA
CGGGAGGAGT GGGATGGAGA GGCTGAGGGA GACCAGAGNA CTGGAGGGTA CTATTTAGAA GAGGACACCC TCTCTGAAGG
TTCAGGTGTA GCGTCCCTGG AGGTTGACTG TGCCAAAGAG GGCAATCCTC ACTCTTCTGA GATGGAAGAG GTAGCCCCAC
AGCCACCTCA GCCAGAGGAG ATGGAGCCTG AGGGGCAGCC CAGTCCAGAC GGCTGTCTAT GCCCCTKTTC TCTTGGCCTG
GGTTGGCGTG GGGCATGCGT CTAGCTTTCA CTCTGGTTCA GGTCCAACAG GGTCCGTTCT GTGCCTTTCG TGCCCCC

SEO ID NO:194: (Length of Sequence = 225 Nucleotides)

GATTATTIGGC TITIGCITTCA TAACATGTAT TITITAAGTAT TTACTCTCTT AATGGCCCTC GIGTCTATTT TATACATCAT
ATCTCTTAAT TCTCTAGATG GAACACTGAA GGACAGGAAT TAAGTAAGTG ACTGGCCATG CAAGGGTTGG AAATTTTACT
GTATCCCTTC CTCRGTAGAA GTTATGTTAA ACATTCAAGC AACCACATAT CTAACAGAGG AGTTT

SEO ID NO:195: (Length of Sequence = 294 Nucleotides)

ATTACTAGAT ATTIGIATGI TAAATTATGI GGGTTTICAA ATTIGIGGAG AATAAGIAAT AGIGACATTA GITTAAGGAC
AGIGTTICAT CAGGGCATTA TITTAATGAA TCTTATATTI AAATGICIGI TICAGGAATT CATGIGAATC TITCTITTITA
TAGAGGACCC ACAGGCATGA NITATTIACT CCTCCGGTGA TAGGTTCTCA CCCTGATGAA AGCGGAAGCA AATTCCAGGT
TAGAACATTA TNCTAGTTAT GTAGGGGGGT ATAAAGTGTG TAAGTTTAAT ATTI

SEQ ID NO:196: (Length of Sequence = 233 Nucleotides)

TTATTTTCT CTAAATTTA AAATAGAAGA CTITAATGGA AAACATTTAG TACCATCATG TCAMCCTGAA TGCCAGCAAT
ACCTCGACTT TTACACACGC AGGAAGCCTA GTAAAAGCCC CGTCAGTAGT ACACATTTCT CTATGGTCCT TCAACAGTTT
TTCATATACA AAATTTTCTG CTATTTTTGC TTTTGCAAAC AGCAATAACT TTTGGGTTTC CCATATGACC ACC

SEQ ID NO:197: (Length of Sequence = 230 Nucleotides)

AAGATATCTA CCTGGAGTAG CTGTGCAGCC CCGCCCTCTG CTTCCCCCAG CCCTCAGGCC AGTGCCAGGA CAGCTGGCTG CTGACAGGAT GTGGCACTGC TTGAGGAGGG GCACCTGCCA CCGCCAGAGG ACAAGGAAGT GGGGGCCGCT GGCCAGGGTA GGGAAGGKTG GGGCAATGGG GAGAGGCAAA TGCAGTTTAT TGTAATATAT GGAATTAGAT TCATCTATGG

SEO ID NO:198: (Length of Sequence = 118 Nucleotides)

TTCTCCTGGG GAAAGGCTG TTGCTGAAGT GGCCGGTTT TTTAAGCATC GACATTTGCA TCCAAAGGTT CAAGCAGCCG CCTCAGGTTC CARAGGCTTC CACCTGATGG CTGCACTT

SEQ ID NO:199: (Length of Sequence = 268 Nucleotides)

TAAATGATGG AGITAAATGA TGTTGTCAGT GCCTATTTAA AAAACTACTC TTCCCCTTCT CTATGAGTTC TACTTTGGTA
AATATTAATA TITAACCAGT TAGTAAAACT AACACCACTA TTTCAATTCT CTTTTGTGCA TAGTAAGTAA ATTTTGCTTT
ACTTACTTTA TAAAAAAATA CTTTACATTT TATAAAGCAG GTTTTAGAAA AACGGTTTAC AAGAAAGTTT GCCTCCATTT
CACTGCCAAT TTAAGCACAG GGGAAAAT

SEQ ID NO:200: (Length of Sequence = 422 Nucleotides)

CCAGTEAGIT TGTGAAAAGC AACAGGGGTA MGACAGGTTC AAGGAAGGAC ACAGACAGTG CCCTGTTTTA GGTTCCAAAT
TTCTTCTTTT TAATGGGTGG TGGGAGCTGA GCAATGATGI CATTTGGAAG GGGCAATGAC TTGTCAATNA TGCAGAACAT
GTAGGCATCA TGGAGAAGGA TGTGCATCGG TCTCTTGGGA TGAAAACTGA TGTGTGTGAT AGGAGTATCC CTTTGGAGCC

AAAGGTGGTG AAAGCCCTGC TTCTGGACAG TCCGGCTCCA ATCTGTATAC TGTTTGTCTG GGATGCTGTA CTCAAATACC TGCTGGTCCG AATGAGCGAT GACAAGGTTG TTTGGTATTG GGGGCAATAG CCATAGCAGT CACTTGGGAA ATTGTAAGCA GGCACCGTGC AGTGAAGTTT TA

## SEO ID NO:201: (Length of Sequence = 273 Nucleotides)

ACTOCACGCT GATGAACCCG ACGTCCATTT CTCCAAGAAA TTCCTGAACG TCTTCATGAG TGGCCGCTCC CGCTCCTCCA GTGCTGAGTC CTTCGGGCTG TTCTCCTGCA TCATCAACGG GGAGGAGCAG GAGCAGACCC ACCGGGCCAT ATTCAGGTTT GTGCCTCGAC ACGAAGACGA ACTTTGAGCT GGAAGTGGAT GACCCTCTGC TAGTGGAGTC CAGGCCCCCA GACTACTTGT TAGGAGGGCT ACAACATGTG CACTGGGTGC CCG

### SEO ID NO:202: (Length of Sequence = 436 Nucleotides)

GGACTICCAAC COCCCAGGAG GCOGAATGCT GAGCTTGGCA ATGGTGGCCT GGATGGGCCT GATGGGCACA TOCCCACCGA
GGACCAGGTC CTGGGAGTCC TGAGGAAGGT GGTTCTTCTG GCTGATGCTT GCACTGGCCA AGGGTTTGCA TGGAGGAGGC
ACACCATGGC GCTGCAGGAC CTGCTCCACG TGTCTCACCA CTGCCTCATA GCAGAACCTG AGGTGCAGCT TCTCCTGCAG
CATGTGCTTT CTCTGCTGCC GCATGCGCCG CACCAGCTGA GGCAGCTCAG GGATTCCKTT CCCAGCCTCC ACCTCCTGCA
CAGCTGCATA GAGCAGTGCA AAGGCTCCCG TGCGCCCCAC ACCAGAGCTG CAGTGCACAA TGATGGGCGT TTGCAGGGGC
CGTGATGCAA GGTAATTTGC GTGCACCTCC TGCGTT

## SEO ID NO:203: (Length of Sequence = 336 Nucleotides)

CTGCATGINT TGGGGACACT TACGCCAAGG CGCCGCGTTC TCATTAGGAG CTGGGACCAG AAGTGAATAA GCCAGGTTCC
TGTCTCAGGG AGCTCCATAG CAGGACTCAG AACCACACAC GGCCCTCTAG GCATTTKTGA AGCTCTGTGC TTCATTTTTT
TTGCTTTGCC TCTAGGTTTTG CCTTTGCAGT ACCAATGCAG CCAGCCCATG TKTCCCCTCT ATGTGGAATG TTAACGATAT
TCCCACTGIT TCTGGTGTCC TTTCTGTAAT CAGAGCTGCC GTGACCATTC CAGTTCAGGC ATCCTGGTGG CCTGGCTTTC
TCTGGGGCCAT AGAGCT

#### SEO ID NO:204: (Length of Sequence = 393 Nucleotides)

GGAACACGAC GCTCAGGTGT CCAAGCAGG ATAAGGACAG GCAAAATAAA TAACCCCCCA ACCCCCATCG TCACTCTGCT
GCAACACGAC ACAAAGGTTT AAAGATCTGG GCCCAAAGAC TCTGGGTCCC TTCAAGCAAG CTCAGGTGGA AGGAGGTTTC
CCCACCCCCC ACCAGGCCTG TTTGCCCCCAG GTTGCCCTAG GATGGAGGCA GTTCAGACCC TGGGTCACTG AAGCTGATAG
GAAGAACTNC GATATCAATG GCCTAAGCCT GCTGTNTGCC CAAGGGAGCC AAGGGCAAGA GCCAAAGGGC CAATTTAAAG
GACGTGGACC TGGGGGGCCA GAGGAGGCAC CACAGCCCAG GGGGCCACG CCCTGGGCCC GCAGGGCACA TGG

### SEO ID NO:205: (Length of Sequence = 390 Nucleotides)

GAGGAAGAGG ATGACCTGAG TEAGCTGCCA COGCTGGAGG ACATGGGACA ACCCCCGGCG GAGGAGGCTG AGCAGCCTGG GGCCCTGGCC CGAGAGTTCC TTGCTGCCAT GGAGCCCGAG CCCGCCCCAG CCCCGGCCC AGAAGAGTGG CTGGACATTC TGGGGAACGG GCTGTTGAGG AAGAAGACGC TGGTCCCAGG GCCGCCAGGT TCGAGGCCGC CGGTCAAGGG CCAGGTGGTC ACCGTACATC TNCAGACGTC GCTGGAGAAT GGCACACGGG TGCAGGAGGA GCCGGAGCTG GTGTTCACTC TGGGTGACTG TNACGTCATC CAGGCCCTGG TTCTCAGTGT CCCACTCATG GACGTNGGGG AGACGGCCAT GGTCACTTCT

SEO ID NO:206: (Length of Sequence = 172 Nucleotides)

CTITACTIGTIC GETGTGGGTG TCACTIGTCAC TGCCACAGCC ACTINEGAGGG ACACACAGCT TTAACCCCTR TTTGCTTAGG NGAAGGGTGG GGGCATTCAG GGTTATAAAA CTAACTATAT ACACAGAAGG TCCTAGGKAG AAAGCCACCC TGAGCACACA TGTCTAGGCA CA

SEQ ID NO:207: (Length of Sequence = 215 Nucleotides)

AAGGCAATTA GAAGATTTAT TGAATATTGG TTAAAAGTAG ATTGACAATG ACATTAAAGA ATAAAGTGTA ATTTATTTGG
TGCTACTTTG TGAATGCTTC CAAGTACAAA TCATCTCACA ATACCATATA CAACATACTT TCAATCACAA CTCAAATATA
AAATAACCTA CAAAATCACA TTGCTATAAT CAATATACAA TAATTGTATT TTTAA

SEQ ID NO:208: (Length of Sequence = 444 Nucleotides)

GEAGTICTCT TGTCCACGG GAGCAGTGTT GCAGTGTATG GAATGCTAAA TCTTACCCCA AAGGGCAAGC AGGCTCCAGG
TGGCCATGAG CTGAGTTGTG ACTTCTGGGA ACTAATTGGG TTGGCCCCTG CTGGAGGAGC TGACAACCTG ATCAATGAGG
AGTCTGACGT TGATGTCCAG CTCAACAACA GACACATGAT GATCCGAGGA GAAAACATGT CCAAAATCCT AAAAGCACGA
TCCATGGTCA CCAGGTGCTT TAGAGATCAC TTCTTTGATA GGGGGTACTA TGAAGTTACT CCTCCAACAT TAGTGCAAAC
ACAAGTAGAA GGTGGGTGCC ACACTCTTCA AGCTTTGACT ATTTTGGGGG AAGAGGCATT TTGACTCAAT CCTCTCAGTT
GTACTTGAGA CCTTCCTCCC AGCCTGGGAG ATGTTTTTTG TATT

SEO ID NO:209: (Length of Sequence = 338 Nucleotides)

GCAGATCACT TGAGGICAGG AGTICGAGAT CAGCCTATAT ATGCAAGTAC ACACACAGGC ACTCGCACGC ATGCATGCTC
ATGCAACACA CATGTACACT CTACATGTAC AGCTCACATA TGCATCCATA CACATGTGCA TGCTCACCCA TACACCAGCC
ACACACAAGT ACTCATACGC ATACATGGCC ACACACAAG TACACCACG TACACCATAT GCATATGTAT GCACTCATAC
ACTCATACAT ATGTGCCCCC TCAGAGAAGT ACACAAGTGC ATGCGCATCA CACATGCATA CGTGCTCATG CATACACACG
GGACATTTCA TACACACG

SEO ID NO:210: (Length of Sequence = 371 Nucleotides)

GAGGAAGTAG AGCCINAGGA GGCTGAAGAA GGCATCTCTG AGCAACCCTG CCCAGCTTGA CACAGAGGTG GTGGAAGACT
CCTTGAGGCA AGCGTAAAAG TCAGCATGCT GCAAGGGGAC TGTAGATTTA ATGATGCGTT TTCAAGGGTA CACACCAAAA
CAATATGTCA ACTTCCCTTT GGCCTGCAGT TTGTACCAAA TCCTTAATTT TTCCTGAATG AGCAAGCTTC TCTTAAAAGA
TGCTCTCTAG TCATTTTGGG TCTCATGGCA GTAAGCCTCA TGTTATACTA AGGGGGAGTC TTCCAGGTGT GACAATCAGG
TTATTGGAAA AACAAAACGT GGTTTTGGGA TCTGTTTGGG AGACTGGGGA T

SEO ID NO:211: (Length of Sequence = 295 Nucleotides)

CCTCCCAACG TGITGACATT ACAGGCGTGA GCACACGCAC CCAGCCCATC TAGCATAATG TTITGCATAG TTGICAGCAG ATAAATATTG AATGACAAAA CTCAGATGGA GGAAAAAGAA CAAAATAACC TAGTTCTCAG AAAGATTTAA TGAGCAAATG GGAAAATGTC AAAAAGATTT ACAGACAGGG GCATCTTAGA GTCACTGGAA TCACACAGGC CTTCCCTCAG CTTGAGGGGC TGCCTGGAGG TGGGGGTGGG GGTACACCTC CTCAGTGGGG AGAGACTTGC CAAAT

SEO ID NO:212: (Length of Sequence = 370 Nucleotides)

TOGOCCEATAT GAGGGGGGTG GGACTGGGCC CCGCGCTGCC CCCCACCCC CCCTATGTCA TTCTCGAGGA GGGGGGGATC CGCGCATACT TCACGCTCGG TGCTGAGTGT CCCGGCTGGG ATTCTACCAT CGAGTCGGGG TATGGGGGAGG CGCCCCCGCC ACGGAGAGCCC TGGAAGCACT CCCCACTCCT GAGGCCTCGG GGGGGAGCCT GGAAATCGAT TTTCAGGTTG TACAGTCGAG

CAGTITICGI GGAAGAGGG GCCCCIAGAA ACCCIGIAGC GCAATGGGT TGGGCGCCCC AAAGGITAAG TITGAACCCG AAGAGCAAAG GAAGAGGCGA TCATCATAAG TGGAGGATTA GGATTAGGAT

SEO ID NO:213: (Length of Sequence = 302 Nucleotides)

ATCIGIOGAA TAATCIGOGG GCTAACACGG ATAACTCAGT ATAAGAACCA CCCAGTIGAT GTCTATIGIG GCTTTTTAAT
AGGAGGAGA ATTGCACTGI ACTTGGGCTT GTATGCTGIG GGGAATTTCC TGCCCANTGA TGAGAGTATG TTTCAGCACA
GAGAGGCCCT CAGGTCTCTT GACAGACCTC AATCAAGATC CCAACCGACT TTTTATCTGC TAAAAATGGG TAGCAGCAGT
GTATGGGAAT TTTCTCATAC AGAAGGGCAT CCCTCAAACC GGAAACCACA GAGATGCTAG GT

SEQ ID NO:214: (Length of Sequence = 354 Nucleotides)

ATGGATGAGT GGGCACCCCG CACAGGGCTG CAGGGTGGAA AACGCTCGAC GGCCAGGTGG TGACTTGGGG GCAGAGAGCG
CAGTGTINGTA GGGGAGGAGA GGTGGTGTCC CTGCTGCCTG GGAGCCAGCC TGCCTGTNCT GTGGGCAGAG CAAGGCCACTT
TCTGCTGCCG GTGCTTCCAG GGCCTAAGCA GCCGCTGCAC ACTCACCAGC GCAAGGCTCC TCTGCAGGGA ACGAGGGCTG
CTACCCATTT CACAGATGAG GGCAAGCAAG GACTTGCCCA GGGTTGCCCA NAGCAAGTGC GTAACAGGCC CTGAGAAGAG
MGCCAGTGAG CTCATCCTGA GTTAATTATG GGCT

SEO ID NO:215: (Length of Sequence = 260 Nucleotides)

TEGRITICADAG TOTAGGECCT CITINAGAGOT GEOTGATICA GOTTGCCAAC AGTGACATCA GOGTGAGGOT TOCTOTGTCC
ACAGCATTAG CTGCGAATAT COTCATGGTC ACAAGATGGC TGCCAGTGGC CGTCAGGGTG TGTGCTTCCT TGTTCACATC
CAGTGGAAGA GTGACAGCCT GCTCCCCTTA GCTCTCTGAC ACCANTGTGA AGGTGCCANG AACTTACTAG CAGGNCTTTC
CTCATGACCC ATTCAACAGG

SEO ID NO:216: (Length of Sequence = 232 Nucleotides)

CTTGGACAAG ATCTGGGATA ATTCTCTGGA TTACCTGGCA GAGACTTTIK TTCTCTTCCC TTACTGTCTC CCAAATAAAC AGTCTCTCAC TCTGTTGTGA GCCACCTGAA GCTGTGATAT TTCCAACGAC TGTAGGAGGA AAAAATTAAG GGGAGAGAGG AAAACAAAAC CAACCAACCC CTAANATCAT TINITTATTG TACATAACGA CCTCATTCTC CTGTATATGC GG

SEQ ID NO:218: (Length of Sequence = 219 Nucleotides)

CTGCAACCAT CCATACCITT INCCCGTOGC TGCTATOGAG TCCCCCAAAC TCCCCAGTOG GGCTTATGAG GGTGGGGCAC
TTATTANGIN GTCTGGGAAG CTCATGCTGC TCCAGAAGAT GCTGCGAAGC TGAAAGGACA AAGGACACCG AGTGCTCAAT
NTTCTCGCAG ATGACCAANA TGTTAGCCTT GCTTGAGGGC TTTCTTAGNC TATGAGGCT

SEO ID NO:219: (Length of Sequence = 390 Nucleotides)

GATAGGIAGO AGAGACCAAG GOGCAGGGIG CITCAGATGA GCAAGAGAAC CCAGTOGAAC CAGATACCCC AGGIGGGCCG
GAGGGACCCC AGACCTTCAG AGGGCTGCCC TGGIGITCTC CACAGTGCAG TCCCTCTGIA TTCCCAGAGI GGGATCGGGG
CITTCAGCCC ACCCTGATGC CTGCCCTCCA GGATGGCTGG TTTAGTCTGG GTCCATGTCC CAGACCCCTC TATTCTGCTC
CAGGACAGCA GGACTTCAGG TCTTTCCTGG GGGTGGATAT AGGAGAAAAT TTCTGCCTGG CACACACCTG GGCTCCAACC
ACTTGCCAAG TGATTCACTC TTAGGCCCAG GGGGAACACA ATGACTATCA TTACTGATGC AGACCTGGCT

SEQ\_ID\_NO:220: (Length of Sequence = 382 Nucleotides)

TTITIGITIT GITTIAATAT TTITIGATATI CICTITGCAT TGAAATGGTA TAAATGAATC CATTIAAAAA GIGGITAAGG
ATTIGITITAG CICGIGIGAT AATAATTITI AAAGITGCAC ATTGCCCAAG GCITITITIG TGIGITITITA TIGITGITIG
TACATTIGAA AAATATTCIT TGAATAACCT TGCAGTACTA TATTICAATT TCITTATAAAA TTITAAGIGCA TITITAACTCA
TAATTGTACA CIATAATATA AGCCTAAGIT TTIATTCATA AGTTTTATTG ANGITCIGAT CGGICCCCTT CAGAAATCTT
TTIATATTAT CCITCAAGIT ACTITCITAT TIATATTGTA TGIGCATTIT ATCCATTAAT GT

# SEO ID NO:221: (Length of Sequence = 314 Nucleotides)

GACTITIGGIT TATTIAAAAA ACAAGCCAAA AAAAAAAAA AAAAACCCCA ACTITIATATA CAAAGTCAAA CTGAAACCAC GGWTTATGGA AAGAGGCAAG AWITATGGGT AACAGGGGAG AAGGCTGGGC CAGAGCCAAT ACCACATTCT GAACACAGGA GCCACGGGAA AGAGGTGCTG GTTTCTTCTG GCAAGACCGG GGTGACTGGA ACGCAGTGGT CCTACTGGCA AACCCAGCCC AACACTGAGC TCTTTCTAGC ATGGACTCCA TTCCCGTGAT TGGCCAAGGG AGACCCTTCC CCCAGGAGGC CTGT

# SEQ ID NO:222: (Length of Sequence = 342 Nucleotides)

TTCCTTCTCT GCGGCGGCAC GTCGCNAGCA GCCTGCTTCG CCCCGTCGTC AACITTGAGC TGGAGGAGAA GCAACITTGG CAGTGGCCGC GGGGTGGGAA TCCCGCTTCT CCTCGGCAGC AGTAGGCTCG CAAGTCGCTG GGGTTAGGTG GGGCAAGAGT TTCGCCGGCG CATCAGCGCT TGCTTCGGAC TGTTTGCAAC GTGTTTCCAG CGAGCTGGGA GCGGGGGTTG TGACTGCGAG TCGTCTGGGG GAGGGGGACT TGTTTTTCTT TTCCTCTAGA GACCTCGGCT TTCAACTGGA TCAAACGTTG TCGAAAGGAT GTAAATAGGC AAGAGCAAAC TG

# SEO ID NO:223: (Length of Sequence = 376 Nucleotides)

GEGATGGCEG CUTTGAGGGG GACCATCATG TCGGAGACGC ATTGGTGCAG GTCTCACCCC ACAGCCCATG CCCAGCCTCC TGCAGACTCA GGTCATCCAG CTGGTCGATG GCTCTTTGCA TACCTGGTGC CTTCTCCTCT CGGGCTTGGC AGGCTTCTCT CAGATGACTC TTTTGCCTTC TTCTCTGTCT TGGCTAACTC CTTGGCCAGC TCTGAACGTG CCTCCTTGGC ACAGCCCGCTG TTTGAACGTG CCTCCTTTGCTAT CCGCCCGCTG TTTGATTTTTG CTGGGCTTAG GGTTGGTAAG GCACAGCCCC AAGAAG

# SEO ID NO:224: (Length of Sequence = 445 Nucleotides)

GTTGATAGAC ATTGGCATTG GGGTTGCTTC CACCTTTTGG CTGTCATGAA TAATATTGCT ATGAACACTA ATGTACAATT
CTTTGCCTGA ACGTAAATGT TTTCATTTCT CTTGGGTATT TATCTAGAAA TGAAATTGCT GTATGTTAAC CCTTTGTTTA
ACCTCTTGAG GAACTGGCAG ACTTTTCCAA AGCAGCTGCA CCATTTTAAA TTCTAACCAG CAGTGTTTGA GGGTTCCAAT
TTCTCTATATT CCTTGGTAAC ACTTGTTATC TGCCCTTTTG GTTAGAGACA TCCTAGTGAG TGTGAAGTGG CATCTCACTG
TGGTTTTGAT GTGCATTTCC CTGATAGCTA ATTGTGTGGA TCCCTTTTGC TTTTAGTGGA ATGAAATATC TGGTAGTCTC
GTATGCCAAA CTAAAGCTAA AATTAAAATG ACTCTGCATG ATGGA

# SEQ ID NO:225: (Length of Sequence = 403 Nucleotides)

TECTOTOGGG ACAGITITOCO GEGCAGOTO TEGCOAGOTI COAGCOCAGA GIOCITCAAGI COAGGGCACO TIGGGCOCAG
CGCAGGCAGA ATCOGAGGIG GIOCITGGCIC TACCOTGGGC CICCITACTOC COAGCACCCC TEGAGGAGGC AGGGGCICCC
CGCAGCCCGAG GCIGCCTGCC CICAGCCCCAC CICTGCATGC TGCTCATGGG GCCACCCTGC CICCITGGGCC CICACTCTGC
CTIAGGGGAGC TGGGCCAGGC ACTAGCCTTT GCCCAGGGGAG GTGGGCCTCA GGCTGCCCAG GTGCCTGCAC CCCAGCCGGG
CTICTCTGGG GCCTCCCCGT CGTCAAGCCT ATATCCTGTC TGTCCCCACC CCAGCTGTCC CTTGCCAGGG GACTGGCATA
AAA

SEO ID NO:226: (Length of Sequence = 440 Nucleotides)

GIGCCITAAG GAGAGAGAIT GIGITCITCC TCTCTCAGG GIGATAACTC AGGAAGCCIC TGGGITGGGA AGACCATCAG
TTCTTTIGIC TTAGGITTCI TITCCIGICC CTCTTCCATC CCCAAGATGI GACCCCATAA AAATTTITCC TGAGITGGCC
AGGCATGGIG GCTCACGCCI GIAATCCCAA CACTITGGGA GGCTGAGGCG GGCGGATCAC GAGGICAGGA GITCGAGACC
AGCCTGACCA ACATGGIGAA AACCCCATCI CTACTAAGGA TACAAAAATT AGCCGGGIGI GGTGGCACAC ACCAGTAAGT
CCCAGCTGCT CAGGAGGCIG AGGCAGAGA TTTGCTTGAA CCTGGGAGGC AGAGGITGCA AGTTAGGCCG
GTTTGTACTC CAGCCTGGGC AAGCAGAGCA AGACCATCTA

#### SEO ID NO:227: (Length of Sequence = 426 Nucleotides)

GACCAGAGAG TICCGGITCG AGGAGCCCGI GGITCTGCCI GACCTGGACG ACCAGACAGN CCACCGGCAG TGGACTCAGC
AGCACCIGGA TGCCGCTGAC CIGCGCATGI YIGCCATGC CCCCACACCG CCCCAGGGIG AGGITGACGC CGACTGCATG
GACGICAATG TCCGCGGGCC TGATGGCTTC ACCCCGCTCA TGATCGCCTC CIGCAGCGGG GGCGCCTGG AGACGGGCAA
CAGCGGGGAA GAGGAGGACG CGCCGGCCGI CATCTCCGAC TTCATCTACC AGGGCGCCAC TTGCCACAAC CAGACAGACC
GCACGGGCGA GACCGCTTIG CACCTGGCCG CCGITACTTA CGCTCTGATG CCGCAAGGGC TCTTGAGGCC AGCGAAGATG
CCAACATCAG GCAACATGGG CCGAAC

#### SEO ID NO:228: (Length of Sequence = 278 Nucleotides)

CAGGACCAGG AGAAGATCCT GGAAGATGCA GTGGATGAGT GGACGGGCTT TAACAACAAG GTTAAAAAGG CCACTGAGAT

TGTTTTAGAA AACCAACAGC AAAACACTGA CAAGGTACAT AAATACAGAT TGGACATTTT AGGGTAAATT CACTGTATTT

CCTACTTGCT TGTAGGAAAC CGAGTAAAGT GGAAAAGCTG TCCTGATCAT ATGGCATGCA CACCAGACTG CAAAAGCNCG

TCCACACTAT TTAACAGGAC TGTGGCAAAA TAGCTTTA

## SEO ID NO:229: (Length of Sequence = 425 Nucleotides)

TTTTTGTTCC CAAGCCTTIG TEACIGACTI TAAATCCTCT CACCIGCAGA ACAGAGATGG CITCAAAGIG GGGAGIGAGG
GAGIGAGGGA GGACCCIGGG CIGAGACCIG TTTTTCTTCC ATTTCTGCTG TGGCTTCCCA CAGCICCCTG GTTCCACACC
AGGCCCTGCT CIGCCGCAGA AAATGGATTC CCAGGCCACA GAGCIGTCAG GCCTTTGACT TIGCAGAGAC CAAGCACCCC
AGAGGCTGIG CGACAGGGCT AGICCCIGGT GGGCCGGTCT GGGGCATGGG GGGCAGGGAG ACTKGGAGAT GGGGAGGGCG
TTGAGAATCC GGGGGTCCT GGATACTIGA CAAATTGGCT CAGGICTTAG CTYTGGYTGC CCCACIGATT GTGTTGCTTG
GCAAGGIGCA AGTYTTCGGC TGTTC

### SEQ ID NO:230: (Length of Sequence = 382 Nucleotides)

TTGGAGGATG TGCTGCCCCT CCTGCAGCAG GCCGACGAGC TGCACAGGGG TGATGAGCAA GGCAAGCGGG AGGGCTTCCA
GCTGCTGCTC AACAACAAGC TGGTGTATGG AAGCCGGCAG GACTTTCTCT GGCGCCTGGC CCGAGCCTAC AGTGACATGT
GTGAGCTCAC TGAGGAGGTG AGCCAGAAGA AGTCATATGC CCTAGATGGA AAAGAAGAAG CAGAGGCTGC TCTGGAGAAG
GGGGATGAGA GTTCTGACTG TCACCTGTGG TATGCGGTGC TTTGTGGTCA GCTGGCTGAG CATGAGAGCA TCCAGAGGCG
CATCCAGAGT KGCTTTAGCT TCAAAGGAGC ATKTTGACAA AGCCATTKCT CTTCAGCCAG GA

## SEO ID NO:231: (Length of Sequence = 398 Nucleotides)

GAGGCTGGAG AATCGYTTGA ACCCAGGAGG CGGAGGTTGC AGTGAGCCGA GATGGCGCCA TTGCACTCCA GCCTGGGCCA GAGCAAGGTT CCTTCTCAAA AAACTTGGAA ATCTGTTGGG AAGTAGGGGG AGGGCAAGGT TAAAACCTAT GCAGGTGTGT CAATTAGACT TGTTCCAACT TGAGAACCTG AATTTTGCAT GTAATTGAAA TGTTCCAGAA CAAGTCTGGC AGTTTCATAA GGGAGTTTTT AGATGCCAAT ACATTGCAGA TAACCATATT GGTTACATTA GGGGAATGAG CATGGGATAG GTGCCTCCCA GTTGGTAGGA TAGCATGAGG AGGTTTCAAA AGTAACCSCT TTAAGGGTTA TGTCCAGTAT TTGCTAAGTA ACCAAGGT

#### SEQ ID NO:232: (Length of Sequence = 272 Nucleotides)

GGGGCTGCAG ACTGAGTTAT TITATITTCGC TATTITCCAGT TIGAAGCTAC TATCATGGGC GITTAGAGTT ATACAAATGA
CACTTACAAA AAATAAAAGA CCAAGACACC CAGAGTGAGA TGCATGTTGG GGACGGGGGA GGCTGGCAGC AGGGGGGCCC
CGGCGGGTTCA CCCCAGGGCT CCCGGAGGGG CGACGCCTGG CTTCATCCAC CCGGGAGGCC CAGGGAGCAC CAATCACAGC
AGGGGCTCTG GCCCAGGTGT CGGCAGCCCA GG

#### SEO ID NO:233: (Length of Sequence = 364 Nucleotides)

ATTITACAGT TITATITITA AATCATITAC ACATATICAT ACAAAGAAAA ATAAATITCA GGATGGAATC CIGOGGACCA
TGGTAGTITA AAAAAAAAA TCTCTCTGAT CATTAGCTAC TAAAGACANG GCAAGAGGCT TAGCAGTCAT TTCTGGGGGT
TAGTGTATCT CCCCATGCAG GGGACAACTG NGAAGAATCC AAGCTGCTCC CTCATCTTCC TTCGATCTAG ATGGGGGAAG
GGGATTTTCC AATGCTCTCC CCTAGAAACA TITCAAGAAG TACAGCAAAG GCTTATGGTA ACACTGGAAC CTATTTGCTA
GAAATCTGGC AAGATTGCAC TTTCTGAACC CAATTTTCCT ATAA

#### SEQ ID NO:234: (Length of Sequence = 217 Nucleotides)

GECCAGGAGE CAGAGGGCCC CEGGGCCACC CCTGCCGGGG AACGTGATGA CCAGAGTCCA GACAGTGTCC CAGAGAGGCC GCGGCCCGCA GACCGGAGGC TCTGTCTGCC CTNCGTGGAC GCCTCGCCAC TCCCAGGGAG GACGGCCTGC CCGTCGCTGC AGGAGGCCAC GCGGCTCATC CAGGAGGAAT TTGCCTTCGA TGGCTACCTG GACAATG

#### SEQ ID NO:235: (Length of Sequence = 221 Nucleotides)

AACTITAAAG TIAGGATTIT AAAATATTIG TAACIGGCTA AATTITAAAG TOGIGACAAA TAATTACITA GGITCAGAAA
TATACACACA CITACICITT AGCCAGITIC TITCAAGGIN TIACIGICCC ATCAGATATC TAGCCATITK CCTTIGCAAA
TIACATACCT TCTTAAGAGI GTATTITTAA GATTATTACT TATGCTTTAT GATGATATAG T

#### SEQ ID NO:236: (Length of Sequence = 221 Nucleotides)

ATAAATGGGT TTCTCACTCC TTAGGGACAC GATTGGAAAC AATACATCCC ATGAACACAG GTGAATGTCC CTGGTTATCC CTGAGCTGGG CAGTTTCACA CAATCANTTT TNCTCTGAGG CCAAAGTCTG TGGTTTGATC ATCTTAGCAG CTTCCAGAAC AGAAAGTAGG TTTACTTTGT CTCCAAANTC TNATTCTCGG TGCTCAAAGA AGAATGACCT G

#### SEO ID NO:237: (Length of Sequence = 251 Nucleotides)

GACATCITIC TAAGATICIC TGIGGGAAAA TGACIGICAA TANAATGCGG GIITCIGGGC CATTCGICIT ACTITCATIT
TTIGATIACA AATTICICIT GACGCACACA ATTATGICIG CTAATCCICI TCITCCTAGA GAGAGAAACI GIGCICCITC
AGIGIIGCIG CCATAAAGGG GIITIGGGAA TCGATIGIAA AAGICCCAGG TICIAAATTA ACTAAATGIG TACAGAAATG
AACGIGIAAG T

#### SEO ID NO:238: (Length of Sequence = 327 Nucleotides)

 TGACCCCACT GTCCCCATAT ACAAGGGTTK GGGGGCAAGA GCATGTGGCT ACTCCCAGCA AGGGRAAAAT GGGAGGAGCA

SEO ID NO:239: (Length of Sequence = 285 Nucleotides)

ATTATTAGIT TATGGTGCTT TAAACCTATC AAAATAGITG TAAGTAAATG GATTTCTTGT NCTCCCAATA ACAATTCTCT GAGCTAGGAT AGATGTCTT CIGGCCATT TACAGGTGAT GACACTGACA TAGGGACTGA GIGGGTAGCT TAAGTNCCAT GGTTACCAGG AGCAGGACCN ACGTTTCCTG NCTCCCAGTC TCATCCTGTT TTCCACTGAC CAGGTTGGTT GCTCCCTTGG AAAGCAGTCC CTGAGAGTTG ACTTAGAAGT TCAGGGCAGAA GAGGT

SEO ID NO:240: (Length of Sequence = 349 Nucleotides)

TITTIGCCATG TIGGACAGGC TGATCTCAAA CTCCTGGCCT CAAATRATCT GCCCAGCTTG GMCTCCCAAA GYGCTGGGAT
TACAGATRTG AGCCACTGCA CCCAGCCTGA CATGCCATAG TITCAGCATT TTCTTGGGCA ATGATCCAAG CTGAAGGCTG
GTCTGAGGGA TCTSAAGAAG CGTATGAGTT GGAAGAGAG GACAGAAAGG AAGAAGACAT GTGAAGAGAG AAAAGGAAGG
AAGCTAGCAG AGGAATGCCC TCCAATAGAG ACTGCTGCCT GAAGCTCAGC CCCTCTGAAG ATAGGTAGGC CAGGCTGGCT
TAGCTGAGGC AGTGGGTTAG ACCAGCCCT

SEQ ID NO:241: (Length of Sequence = 233 Nucleotides)

GIGCAGCGGT CTGCCTTCAT CTTTTAATGG COGGTGCGGT ACAGTTAGTG GACAGACGGG GGATGGGACA CAGCAGGGGT GAAACAGGGC AGTCACAGCC GGGGCCGGGG ATCTGGAAGC GGGGGGGGTC CTCCCCCTGG AAACACCGTN TCTGGAAGGA CACCCTTAGG ATCCCCTGAC CTCARGGTGC CACCCACACG GGCCTGGTGT TCTGGGAGGC CCGGCTKGAG TGA

SEQ ID NO:242: (Length of Sequence = 372 Nucleotides)

ATATGIACTA CATTIGGIGG AATACGCATG TACAATICTI CAAAAATAGI AAAGAGCAAA ACAAACAAAA AATAGIAGAA GCACIGGAGA AATACACIAT GGCATAAACT AGITACGGGT GGGATGTCAC ATGGACCATA TCTACACTCI GIGGCAACCT TCTTACCTGA CTCCAAAGGA TCAGATAATC AAACAGGAAA TTATGGTAGG AAATCAGAAA ATTGAAGTAT GCATTCATAT CCTAAGCATT TTATTTTAGC TCAAAATATA AAAATATTCA TCAGTTAGCC AAGCTTTTCN GATGAGAGAT CATAGCCTCC TCTTGATAG GGGGTTTCTT GGGTTTCCTT GATTTCATGT TTCAGAGTTT TT

SEO ID NO:243: (Length of Sequence = 256 Nucleotides)

CTCACACATT CATACCCAAG GAAGAGGCAA ACACACTCAA GTCCAGAGTT CCCAGTGGTG CCGCCCAGAC CTACTGTCCC GGGGGTGTTA TGGCTGTCCC TCGGCTTCCC CAGAGCAGCC AGGACAGCCT GCACCGNCTN CCAGACTCTC GCAGGAAGGG GAGCTCTGCC CTGGGGAGGA AACTNACAGG CTGGGAGACA AGACTCCCAT CGCAGGGACA TGCACAGCAG CAGCCACAGC CCCGCGGACG GGGCAT

SEO ID NO: 244: (Length of Sequence = 220 Nucleotides)

CAAATEGCAG TICTCGAGAA TOGACGAGGA ACTTAAATCT GGACTCAGGG TITCAGTGCG GTCTCCGACT CCCACCACCC CGCCCCTCCG NCTGTCTCGC CGCCAGGNGT GACCTCCACG CGAAGGAATC TTCTTCGGAT GGGTGCACCT TGCCAANAGG TGTGGCACCT GGNGGACTAG GAGGCGCCTC CANACTAAGG GCGCTCANTG CGGCGTTCTT

<u>.</u>

SEQ ID NO:245: (Length of Sequence = 239 Nucleotides)

TRATGCTCA TGIAACCTIC TIAATAGIGC CITGICIGCT GGGITTGIAG CIGIAAGAGT TCIGCAAACT GGCCCIATAA AAATATTGAT GCTGTCCATT AAAATGAATC TCTCTCTCTC ACTCAGTCTC TCTCTCTGTC TGTCTCTCTT TCTTCTCTCTC CCIGCCATGT GIGIGCTCT CTCTACTCCT CTGATTTTGN CCTCTCTCTC TATTCTGCTA CTCTCTCTCC TCTCCTCCCG

## SEQ ID NO:246: (Length of Sequence = 269 Nucleotides)

GETTICACCA GCETTIAATE TECTCIGATE TIGACCETCC CTCINAGINI TCTGGGGAGG AGGGGGTGGG GCGGAGGGTC
AGGAAAGCAG GCTCAGCTTC CAGGGTCAGG GAGTTGTGGG CCCAGAGGGG CTGTCACAGT GGATGCACCC TGCCCCCTCC
CTCGCCAGAC CCGAGGGTAG GGCAGAGGCA CCTCCTCCNC AGCCTNTGGG CTGCACCCAC AGGGAATNGA GGGGAGGGGC
ACCATTACCA CTGGACCCAC CAAAGACCC

### SEO ID NO: 247: (Length of Sequence = 297 Nucleotides)

CTATTCAAAG TITACTGACC TCCCCAGCCA GGCAGGCCAA CCCTTCCGAG CAGGGGAAAT GICCATCTAG CTGCCCTCTG
CTGGGTTGCA GCCTATGCCA TGAGAGGGTA CTGGAAGCAG GAGGGAGGCC TGGCTAGGGC AGGCCTTAAA CGCAAGGGAA
GCTGAGCAGA GATCTGCACA CTCAACCCCA TTTGATATTC TTCTCCTCCT CAGTCATGGC CAGCGTGTTG GTGACTAGAC
CGGTGCCAAT AGTCCGGTTG CCATCTCGCA GGGTGAAAAG ATGGCCTTTC TCTTAAG

## SEO ID NO:248: (Length of Sequence = 281 Nucleotides)

ACAACAAGCA CACCAACTAT ACCATGGAGC ACATCCGCGT GGGCTGGGAG CAGCTGCTCA CCACCATTGC CCGCACCATC
AACGAGGTGG AGAACCAGAT CCTCACCCGC GACGCCAAGG GCATCAGCCA GGAGCAGATG CAGGAGTTCC GGGCGTCCTT
CAACCACTTC GACAAGGATC ATGGCGGGGC GCTGGGGCCCC GAGGAGTTCA AGGCCTGCCT CATCAGCCTG GGCTACGACG
TGGAGANCGA CCGCCAGGGT GAGGNCGAAG TTCAACCGCA T

### SEO ID NO:249: (Length of Sequence = 383 Nucleotides)

AGCGCATCCA CACCGGGGAG CGGCCCTACC CCTGCTCCTA CTGTGGCAGG AGCTTCCGCT ACAAACAGAC ACTCAAGGAC CACCTCCGTT CAGGCCACAAA TGGAGGCTGT GGGGGTGATA GTGACCCATC AGGTCAGCCA CCCAACCCAC CAGGTCCCCT CATAACTGGG CTTGAAACTT CTGGCCTGGG TGTCAACACT GAAGGTCTAG AGACCAACCA GTGGTATTGG GGAAGGGAGT CGAAGGGGAG TTTTGTAAAT CCAAATCTCT GTGGVTTCAT GCTTTGTATA TGCTCACAGC AGGGCACAAT AATCCAAGAG AAGGTCTGTG AGCCCCAATC CAACACCCAC AGTAATTATA ATCTTGGCAC ATCAATGGAA TTT

## SEO ID NO:250: (Length of Sequence = 397 Nucleotides)

GTATCCTACG TTACAACAAT AATATCATGG GAGAAATAGA AATAGCCTAG TTTGCTTCCA ATAGAAACTG CTTTTAACAT
GGGCTGTATA TAAAAATATT AAAGAGAAAC AAAACTGTAC ATTTCCTCAT TGCTCCGCTA CAGACAACCC ATGTCATAAC
CTTGTTGCAA ATATTTTTCT CCTATAGCAG TAAGTACAGC ATTAGAACGT GATTAGAGG TCTGTTGATG AAACACAAAT
GTATGTTTT ATTGATTTTT ACTTTAGAAC ACTACAGAGT TCCTGGGACC GGGGTGAANG GCATTTAGCT GGGGTGGTTT
GTGTGGGGGT TAAATACCTT CCCCACTTGCA AGTGACTTGC CTGTNCCCGC TGCGGGAATC CTGTNCTTG GGTGGGA

## SEQ ID NO:251: (Length of Sequence = 276 Nucleotides)

GGCCATAAAA GAAAGAGCCT GTTACCTATC CATAAACCCC CAAAAGGATG AGACGCTAGA GACAGAGAAA GCTCAGTACT
ACCTGCCTGA TGGCAGCACC ATTGAGATTG GTCCTNCCCG ATTCCGGGNC CCTGAGTTGC TCTTCAGGNC NGATTTGATT
GGAGAGGNGA GTNAAGGCAT CCACGAGGTC CTGGTGTTCG CCATTCAGAA GTCANGACAT GGACCTGCGG CGCACGCTTT
TCTCTAACAT TGTCCTCTCA GGGAGGGNTC TACCCT

٠,٥

11

SEQ ID NO:252: (Length of Sequence = 314 Nucleotides)

CCTGAACAGT CTGTTTCATT TGACTGTTTG GGGGTCTCCC AGTTTAAGCA AGATATTTAA GCCTTATTTC TCTTGGCATG CTTGGATTCC CCAGTAAAAA AAACTCCTGC CCTGGGCTGA CAATCAAAGT TCTGGGAACT AATATGGATA AGCAAGCTGG AAATGGAGAA GGCTATTCAC TGTGCCTGGG TCCTACTGTT TTCTGGATGG GAACTGCTTT TCCATTAGGC CTGGTGTGCC CTGGAAGGGA MGAGCCTCTT GCAGAGACTA CAATCTTGGA TGGGTCCTTT GCCAAGTTTG AAGGTAGGAA CCCA

SEQ ID NO:253: (Length of Sequence = 293 Nucleotides)

GAACACTCTG CTCCAGCCAA GGTGGTGAGG GCAGCTGTTC CTAAACAGCG CAAAGGCAGC AAGCCACAGT CCCACAAGCC
TCAGCCTACC CGTAAACTGC CACCCAAGAA GGACATGAAG GAACAGGAGA AAGGAGAAGG GAGTGATAGT AAGGAGAGTC
CAAAAACCAA ATCAGATGAA TCAGGGGAGG AAAAGAATGG AGATGAGGAT TGCCAGCGAG GCGGCAGTA GAAGAAAGGA
AACAANCACA AGTGGGTTCC ATTACAAATA GACATGAAGC CTGAAGTGCC CAG

SEO ID NO:254: (Length of Sequence = 413 Nucleotides)

CITTITCITA ATATATAAT ATTTACCAAG GCAAGACAGT GATTTATGGA CATTTAAATT AGITTAGCIT TGITCIGCIG
TTCTAAAACA TIGIGTACTG TCTGATAGAC TTTTAAAAAA CAGIGCITTT CCAGGATGAT TTATGATATG CAGTATTGIT
TATAGATGCC CATGGCTTAA CCTTGAAAAG TCAATTAAGT GACACAATTA AGAGAGATAT GAATAGIGGI AGAAAAAGCA
TGIACTCIGG ATAAGIGGGG GTAAATCIAG TATTTGITAT TCCTGTCAGT AATATTGICA MIAGTATTTT TTAGAAGGIT
TAATTTTTTT ATGGGITATA AATTCATGIC ACTCTTCIGC AATGGGIACC ATCAGIGGGA ATGCNGGAAT TATCCATGCT
TTGGGGGTTA AAA

SEO ID NO:255: (Length of Sequence = 376 Nucleotides)

GGGTCCAGGG GAGAATCAAT ATATCTAGTA TAGTTTATAT TIGTACCTIC TCTCCTTAAG AGTTACAGTG AGTGACTCTA
CTCCTCAAAT GGAGCACCTC TCTCCAGGAG AGTAAGAAGA TCACATAAAT AGAAAGTGAG CTTTGGACTC TAACAGACAT
AGGTTCATAT TCAACTCTGC TACTTAATAT CCATATTGGT TTGAGTTATT TAACCTTGAC AATCCACACT GTAAAATGGG
TAAATAATAA ATACCCTCCT CTCAGAAGTG TTACAAAGTT TATATGAAAT AATGTGCTTA AAAAGCTGGG TACATAGTAG
GAGCTTAGTC ATTGTTTATT TTCTCCCTCA TACCCATACA TCNTTCATTC CTACTG

SEO ID NO:256: (Length of Sequence = 241 Nucleotides)

SEO ID NO:257: (Length of Sequence = 406 Nucleotides)

CAAGGGTGTC CITCGCCAGA TCACTGTTAA TGATTTGCCT GTGGGACGCT CCGTGGATGA GGCTCTGCGG CTGGTCCGAT
TAAGAAAACC AAGAGAGGCC GGGCACGGTG ACTCACGCCT GTAATCCCAG CACTTTGGGA GGCCGAGGTG GCGGATCATG
AGGTCAGGAG ATTGAGACCA TCCTGGCTAA CACAGTGAAA CCCCGTCTCT ACTAAAAATA CAAAAAAATT AGCTGGGCAT
GGTGGCACGC GATTGTAGTC CCAGCTACTA GAGAGGCTAA GGCAGGTGAA TCGCTTGAAT CCAGGAGGTG GGGGTTTCAA
TGAGNCCGAG ATCGTACCAC TGCACTCCAG CCTGGGGCAA CAGAGTANGA CTTCGTAACC CCCCAACCAAC CCNCCAACCC
CCCGCC

SEQ ID NO:258: (Length of Sequence = 157 Nucleotides)

## SEO ID NO:259: (Length of Sequence = 361 Nucleotides)

AAGCAGATAT AAATGGGACC ACTGTGAATC AAAGGGGAAA AATTCCAGGA AAAAAAAATT CCAATAGCTT CACAGTTTAA
CTGAGGTTTT GGAAAAACTT AAGTGAATTC AGCTGATGTT TGAAATATCT GTCTACATTT AATTAGATGT GTTGTATTTA
CCAAGGAGGC ACAAATATGT AGTTCTGTAG ATTTTAATAC TAACTTTTCC AGTAAGAAAA ATAATACCAG GTGATTTCAA
AAAGGGCAGT GATCTATAAA CACTCAAAAT GCATCTTTGA ACAGGGGAGC AGAAATAGCT AATTTAATGA AAACAAACCT
TAAGCACTTT ACTTGGCTTC TAATAAGGCA TCCCAAGAAA A

## SEQ ID NO:260: (Length of Sequence = 349 Nucleotides)

CAATACATGT ATACAGTGTA CACTGATCAA ATAAGAGTAA TTAGCATATT TATCACCTCA TITCTTTTGT GGTGAGAACA
TTTAAAAATCC TTTCTTTTG CTATTTIGAA ATATACAGTA CATTGCTATT AAGTATAGTC ATCTGGCTGT GCAATAAAAC
ACCAGNACTT ACCCCTCCTG TCTGTGACTT TGTACCCTGT TCACCACCCC TCCAATCCTC TAGTAACTAC CATTCTACTC
TCTACTTCTA TGAGCCTGAC TTTTTAAAAT TCCACATGTA AGTGAGATTA CATGGTATTA TTCTCTCNGT GGCTGGCTTA
TTTCACTTTA ACATAATGTC CTCTAAATT

## SEQ ID NO:261: (Length of Sequence = 415 Nucleotides)

GGAAGATGAG GATCTAGGTG TGAGCGTGCA GAGCCCTGAG GCTGGGCAGG CAGGGAGCTC TGCCTGCACA ATGATGTAGC CATGTGTGGC CACACCAGCA CTGGGCAGCA CCTCTGGGGA GGGGGCCAGG GCAAGGACAA CTGGAGAGAC AAAGCCAGAT GGGGCCACGT CCTTAGAAGT GTGTGTGCAC GCACATGTGT GTGTGTGTGT GTGTAATACG CAGGGCAGAA ACACACCATG TAGGTCAGGC AGGACAGAAA CACACCATG TGGGCCAGCA AGGCCAGAA CACATCATGT AGGCCAGGCG TGGTGGCTCA GGCCTGTAAT GCCAGCACTT AGGNAGGCCA AAGTGGGCGG ATCACCTGAG GTCAGGAGTT CGAGACCAGC CTGGCCAACA TTGCAAAAACC TCATCTCTAC TAAAATTCTA AAATTAGCCA GGCGT

### SEO ID NO:262: (Length of Sequence = 382 Nucleotides)

GECATGGGT CTGGCTTTAA TGTGTAACTG ACGTGGGTCA CTGAAACTGT TCAGGCTGAT CTTGAACTCC TAGGCTCAAG
TGATCCTGCT GCCTTGGCCT CCCAAAGTGC TGGAATTACA GGAATGAGTC ACAGCACCCA GCCGGCTGTG TTTTGTTTTT
TGTTTTTTAC CCCGACAGGT NCTCAGTCAG TCGTTAGCTG GAGTGAAGTG GCGTAACACA GCTCACTGCA GCCTTGATCT
CCTGGGCTCA AGTGATCCTT CCATTTCTTC CTTCCAGAGT AACTGGTACT GCAGGCCCCAC GGCACCACAC ATGGCTAATT
TTTAAATTTC GTAGAGACGA GGTCTTGCCA TGTTTGCTCA GGCTCCAGCT GTTGTATTCT TT

## SEO ID NO:263: (Length of Sequence = 447 Nucleotides)

TGTATCAACT CAGAATITCC AGAGAGCTCT TCCTGGCTGA AAAGATGTCC AAGGATCATC TCCGGAATGG AAGAGGTGAG
GCCTGTTAGC TTGTGGGCTG CCCAATCCAT CCAACCCTTG GCATTGGGAT CAATGTTGAT GAGGACAAGA CCTTCAACAG
TGTCCGGGTG GTTAAGAGCA TATCTCGCCA GGATGTAGGC TCCAGCTCCA ACACCAACTC CAATTATTGT AGAGAAATTT
AGGTACTGCA GGACGCAAGG GATCATGTCT GCAAGCTGGT CCAGAGATGG GTACTGATAT CCCAAAGGGA ACACAGGGGC
TCCCTCTTCC ATTCCAGGGG CATCCACATG GACCGGCACA AAGTTCTGAA TGATTTCCTG CATGTCCTCG AACTKGAACA
GTGGCTGGAG GAAAGATTTA TAGTTGAGTC CACATCGGT AGGTAAG

SEQ ID NO:264: (Length of Sequence = 317 Nucleotides)

TTITOGCTGT CAACAGACAG TTITATICTAT ATACAAACAC AATTITGTAC ACTGCAATTA AATAGAATGG AATGAGGGCT
CCTCCGCATT CCTCCCCGAG TGACTGGTTT GGCCGCCGC CACTCCATCC CCGAGTGGGA CTGGACCACG GCCCTGGNTG
CTGCCACTGA TGTTGGNGCC TGCACCCCAC GTCCCTATGC CCGAGGGGCA ANTCTGCTCT CCCGGGGGACC CCAAGNCTGG
NGCACACGCG GGGAGGGCG GGCCATGGAG AAGGCACTGC AGGGAGCACC AGGCAGAGCC GTGTTGAGGC CGGCCGG

#### SEQ ID NO:265: (Length of Sequence = 270 Nucleotides)

GCAGAGCAGG TEGAAGTGAT CAGGAACCAT AGITGACAGT TCCAATCAGT AGCTTAAGAA AAAACCGTGT TTGTCTCTTC
TEGGAATGGTT AGAAGTGAGG GAGTTTGCCC CGFTCTGTTT GTAGAGTCTC ATAGTTGGAC TTTCTAGCAT ATATGTGTCC
ATTTCCTTAT GCTGTAAAAG CAAGTCCTGC AACCAAACTC CCATCAGCCC AATCCCTGAT CCCTGATCCC TTCCACCTGC
TCTGCTGATG ACCCCCCAG CTTCACTTCT

### SEQ ID NO:266: (Length of Sequence = 297 Nucleotides)

ATGAGGGAG GCCTGCGAAG TGGCTGGCAT GCAGCAGGTG CTAATGAGTG TTGCAAAGGT GATGTCACGC AGGCAGCTTC COGTGGCCAG AGAAACATTG CAGAGAAGGG ATAAGTAGGG CTTAGTGACT TTGACGGGTC AATGGAAGAA TGACCCAAAG AAGGCTTCAA GGCCAGGCCT GCAGTTCTCC ACCACAAAGG CCCTCACTGA TAGCACCCAC TCCCCCACAC TCAGCTTTNG GGCCTAGGTC TGGGTCACCC AGCTAGAAGC CACAGGACCC TGAGGCTTCC GAGGGGT

#### SEQ ID NO:267: (Length of Sequence = 387 Nucleotides)

CTTGTTTCA TCATGAGCTC GATCAGATGT CTCTCGATCT TCAGACTGGT GGTGTCCTAT AATGTCCTGT GCACGCATTC
TTGAGCTTTC CAGGATTTCT GTCTGTTCTC TCTGTTTATC TACAGAAGAA ACTTTCTCCT TGAGTTCCTG TTCTTCGTAG
CGCCTTGAAC TCTCTTTCCT TTCTGGTTTA CGATCCTCCT CTTTCCATCT ACCCTGTCTG TCTTCTGTGA GGTGCGAGGG
ACTAAGAGAA CGAGATTCTT GAGGTCGTAC AACTTGGCTC AAGAGTCTGT GTTTTTTCAT TTNINATCAT CTCCACTGTT
GTAGGCATCA CTGTCCGGAG AATGTTCACG CCGGCGCTTT CGGGGGACTG TCTAGGGCTG GGACTCC

### SEQ ID NO:268: (Length of Sequence = 318 Nucleotides)

CCTGAAGGIT ACCICTITIGG AGAGAACATG GATCTGAACT TCCTGGGCAG CCGCCCGGTC CAGTITICCCT ACGICACTCC
TGCCCCCCAC GAGCCCGTGA AGACGCTGCG GAGCTGGTGA ACATCCGCAA AGACTCCCTG CGGCTGGTGA GGTACAAAGA
CGATGCCGAC AGCCCCACCG AGGACGGCGA CAAGCCCCCGG GTGCTCTACA GCCTGGAGTT CACCTTCGAC GCCGATGCCC
GCGTGGCCAT CACCATCTAC TTCCAGGCAT CGGAGGAGTT CCTGAACGGC AGGGCAGTAT ACAGCCCCAA GAGCCCCT

#### SEQ ID NO:269: (Length of Sequence = 422 Nucleotides)

ACAGGICITI TECCCATTIT GAAATAGCAT TECTIGITCT TITECTOGAT ATTAACCCCT TETCAGGIGC
ACAGTITGCA AGITACCTIT TCTCATCCTA TAGGITATCT CCTCACTCTT GATTGITTCT GITGCTGTGC AGIAGCTITT
AAGITTGGTG TAATACCATT GTGTTTCTC TGCTGCCCTT TTAAGITTCA CTGGGTCAAA AGITTAAAAT TTGTGAATTC
CTATATTTTT AGGGCAATTC TCCTGCCACT GTTGGAATTA TGCCTCAATC TATGCAGTAG AATATTAGTG TGAAATGCTT
CTGTACCAAT GGAGTGATG CTGGATGGTC TCTATCATAA ACCCATACCT CATCAACACA AACTGCAATT ACACAAGGGC
TCTATATCAT GGATCTCCAT TT

### SEQ ID NO:270: (Length of Sequence = 376 Nucleotides)

GAAGAAGAC CCAGACCIAG GGGAGIAIGA TCCACTIACC CAGGCIGACA GIGAIGAGAG CGAAGACGAT CIGGIGCITA
ACCIGCAGAA GAAIGGAGGG GICAAAAAIG GGAAGAGICC TITIGGGAGAA GCGCCAGAAC CCGACICAGA IGCIGAGGIII
GCAGAGGCIG CAAAGCACAI CITICAGAAG TCACCACGGA GGGCIACCCC TCAGAACCCC TINGGGGCCI GGAACAGAAG

GOGGCCTCCT CCCTGGTGTC ATATGTGCGC ACGTCTGTCT TCCTGCTTGA CTTTGGGGAT CTCGATGATC CTGGTGCTCC
TGTGTGCTTT CCTGATCCCC TGTCCTCCCA GAGATCTTGA CAGAACTGGA GCCGCA

## SEQ ID NO:271: (Length of Sequence = 346 Nucleotides)

TETTCACETT CCCTTTCTT ETCTTTCTTT TTCCTATCT TATCTATACT TOGACTCCTC TCCTTTTTCC TCTCTTETTC
TTTACCCTCA CCTTTATCCT TATGACTGIN CCCACTAAGA TTTCCACGTT GATCATCAAT TTTACCNCTA TCTCGACTCC
TACTGCGACT GCCACGATTG GTTCGTCTAT CCCTTGAGCG ACTTCTACGA ATGCTTATGA AAAAGAATCA AGTTGCNCAC
CAAATGTTTC ATAGCAGTAG GAAATTTCTT TTAGAGACTT CTGATGGGAA ATTTGAAGTG TATGTTGCTA TCAGATCAAG
TGCAGGAGAG GTATAAGGCT ACTGGA

### SEO ID NO:272: (Length of Sequence = 394 Nucleotides)

GUIGUTGITG TIGAGUCGA GUUTGCACT GUIGCUTGG CUGAGUGCA AUGUTGCAAU CUCGGUUAC TGUAACCUCC GCCUCCAGG TUCAAGCCAT TCUCUTGCUT CAGCCUCCIA GUAGCUTGG UUTGAACCC CUGACCAGCAC ACCUGGUAA TUTUTUTATAT TUUAGUACA GACAGGGUTT CACUATGUTG GCCAGGCUTG UUTGAACCC CUGACCUTGT GAUCUCCCA CCUCAGCCUN CCAAAGUTTU TUAAGGAAAC ACUTTAACC CUTAAGGCUT TCUTUCAAAC TCAGAUCCCC TUAACCAAUT GAUCAGACGI GGCAAAGUTT TGCUCCAAAG TUTUTGGACT GGGUUTCCAC TUTAGGCUTA CUGA

#### SEO ID NO:273: (Length of Sequence = 259 Nucleotides)

CAACCIGTAC CCAGGCIGCG AGAACGTRAG TITRAGGAGC CGCAGCATGA TGITCGAGCC GGGTCTTACC AAAGGRATGC TGGAGGIGIT TKTGGCCCCG ACCCACCACC CGCACTGCTC GGCCGATGAC CAGTCCACCA AGGSCATCGA CATCCAGAAC GCTTATTTRA ATGGAGTIGG CGATTTCAGC GIGTGGGAGI TCTCTGGAAA TCCTGTGTAT TTCTGCTGTW ATRACTATTT TGCTGCAAAT AATCCCACG

### SEO ID NO:274: (Length of Sequence =348 Nucleotides)

TCCCAGTIGT CCCGATIGTA ACTCAAAGGG TGGAATATCA AGGTCGITTT TITCATTCCA TGIGCCCAGT TAATCITGCT TTCTTTGTTT GGCTGGGATA GAGGGGTCAA GTTATTAATT TCTTCACACC TACCCTCCTT TTTTTCCCTA TCACTGAAGC TTTTTTAGTGC ATTAGTGGGG AGGAGGACGG GGAGGACATAA CCACTGCTTC CATTTAATGG GGTGCACCTG TCCAATAGGC GTAGTATCCG GACAGAGCAC GTTTGCAGAA GGGGGACTCT TCTTCCAGGT AGCTGAAAGG GGGAAGACCT GACGTACTCT GGGTTAGGTT AGGACTTGCC CTCGTGGT

### SEO ID NO:275: (Length of Sequence = 396 Nucleotides)

GITTGGTGAA TITGGTCTGT GATAAAATTG GAGITCAAGA AACAAACAGG AAACTACAAG TGCCCCTTCG CCCCAGGTC ACCCGAGTGG CAGGGCAGTG ACCGCTGCTC TCAGGCTGCC CAGTGTGGAC CTGCCTGTCG GAATGCTCCT CCTCCACGTC CCCTCGCTCC TGTGTCCCAG CCACATGCAC CTTCCCTCTA CCTCTGGGAT CCCTGCACCA GGTCTGCCCC TGTCTTCTCA GGGCTGCTCC TNTTGGNCCA CAGGACCTCA GCTGGAATGT TGCCTCCTCC AAGAGGCCTT CCTGACTATT CAGCTCACAG TGGCCACCCA GCCACAATCT GCCATGTGCT TTGGGGGATT GTCTGTTAAC TGGCAACATA CTGGCAGCCC ATAACT

#### SEQ ID NO:276: (Length of Sequence = 381 Nucleotides)

GGTGTCGGGG AGGCTGCGCA AGGGGGCGAG CCCGGGCAGCC CGGGGCAACC CCCGACCCAC CGCCGCCCCCA GCAGCAGCAC AAGGAAGAGA TGGCGGCCGA GGCTGGGGAA GCCGTGGCGT CCCCCATGGA CGACGGTTT NTGAGCCTGG ACTCGCCCTC CTATGTCCTG TACAGGGACA GAGCAGAATG GGCTGATATA GATCCGGTGC CGCAGAATGA TGGCCCCAAT CCCGTGGTCC AGATCATTTA TAGTGACAAA TTTTAGAGAT GTTTATGATT ACTTCCGAGC TGGTCCTGCA GCGTTGATGA
AAGAAGTGAA CGAGCTTTTA AGTTAACCCG GGATTGCTAT TNAGTTAAAT GCAAGCCAAT T

SEO ID NO:277: (Length of Sequence = 206 Nucleotides)

TTAATACEAC AGGCCTGCG CCCGAGTAAT TCAAGCCCTT CGGAAGTGTC ACCGGCTGCC AGGCCTCGGA TGCAATCCTG
GAGGCGGGAG ATTCGGCCTN AAGACTGGCT CGAGCCGCCC AGGGGCTCCA TGGGAGACTA ACGCGGAAGT YCCAGCCGTC
CCAGTGCCGT GACGTCCCCC CTTGGTGGGG CCTGCACCCG ACTACT

SEO ID NO:278: (Length of Sequence = 260 Nucleotides)

ACCIGIAATO CONGCACTIT GGGAGGCTGA GGIGGGCAGA TCACGAGGTC AGGAGATAGA GACCATCCTG GCTAACACGG
TGAAACCCCA TCTCTACTAG AAAAATACAA AAAATTAGCC GGGCATGGTG GCGGGCGCCT GTAGTCCCAG CTACTCGGGA
GGCTGAGGCA GGAGAATGGC GGGAACCCGG GAGGCGGANT TGCAGTGAGC TGAGATGCGC CCGTCTCTCC AGCCTGGGCA
ATAGAGTGGG ACTCCATCTC

SEQ ID NO:279: (Length of Sequence = 308 Nucleotides)

GIGITIGGGC TCAGGGITIGG CCAGCITGCA GAGGAGCAAG CIAGTAGAAA TATTGCAGGG TTCCCAAAAC CAGGICAAGC

AAGATGCCAT GICACCCCTG AGCATGCCTG TCTTCCCAGG GGIGIACCTC TTGGCTGGCA AAGCCAAGGC CAGTGGGIAC

TTGTATAAAT CACATGGGIA TGTTCTTGGT TCAGTGATCT TGGAGTGATG ATGGTAACIN ATGAACAGAG AACTTTYYAG

AACTTKGGIC CIGICTTCCT CCCTGAACCT AGACAAGTIT CACCCCTCCT CCTGTACCCA ACCCCATT

SEQ ID NO:280: (Length of Sequence = 402 Nucleotides)

ATTITAGCAG CITICTIGAA ATTIAAAATA TATGIGIAAG TATCICATTI ATATGCATIT CTAGITTCTI TATACAACAG
AATAACITCI TITACATCAA ATTICIGAAT TIGACTAAAT TIAGAAATAA TIGAATCTCA TICCATTAAAT ATAGICATAG
AAGGAAGGAA ATATGAAAAT TAGGATTICA GATGITTGAA CATAAAAGAT AATTITAAAC ATTICAGTA ATCIATTTCT
TITTITTTC GAGACGGAGT TITGCICTGI CACCCAGGCI GGAGTGCAGT GGCGGGGTCT TIGGCTTACTG CACCCTCTGC
CTCCCAGTTC AAGTGGATTC TCCTGCCTCG NCCTCCTGAG TAGCTGGGGT TACAGGGGCA TIGCCAACATG CCGGGGCTAA
TT

SEO ID NO:281: (Length of Sequence = 313 Nucleotides)

GAGAATCCGT CTTAAAAAGA AAAAAAGAAA ATTATAGAGG GAGATGAGGT GGGACAGAGT CTGGCAGTTC ATCAGGGGGA CTGAGAAGGT GGCATTTGGA GGAGAGGAGG CAGTGAGCTG TGCAGTGTCC AGGCAGCCAC CCTTCCCAGC GGCCACCATG ACGGTGTCCT CATTGCTTTA ACCATTAGTA ATCATTCATT CATTCATTCA TTTATCCGAC GTCAGCTGGA GGNCCTGCCC GNGGGGCATG CGCTTAGATT TNGGAGGCCT TCCGGGATGC TTGCGCTCCA ACGGGGGAAG GCCGACTTGG GCT

SEO ID NO:282: (Length of Sequence = 217 Nucleotides)

TGACCTCAGT TGATCCACCC ACCTTGGCCT CCCAAAGTGC TAGTATTATG GGCGTGAACC ACCATGNCCA GCCGAAAAGC
TTTTGAGGGG CTGACTTCAA ATCCATGTAG GGAAGTAAAA TGGANGGAAA TTGGGGTGCA TTTTCTAAGG ACCTTTCTAA
CANATGGCTA TAATNIAAGG GGTTTAGGGT CCTTTTTTTT TTTTCAGGGA TACATTT

SEQ ID NO:283: (Length of Sequence = 327 Nucleotides)

TAGAGAGGC TITACTCCTG GTCCCATGC GTAAAGATGT GGCTGGGCCT GACAAGGCTC AGCCTCCAGT CTTAAGATGG GCACAGAAGG GCAAGAAGTA AGATGACGAG TCCCAGAATT AGGACAAGCC ATGAGCCAAG GCCTGGTCTG AGCAAGGGCA GCCCCCTGTC CCAGACACAG GCACCCCCAA TCTCACTTTG GACAGAGCCA ACGTGGGGGG ATCCTCCCGG GCCTGGGCCT GTCAAGTCTG CCTGCAGGAC CCTGCCATTG TGCTCAAATC ACAACCATTT TTTGCTTCCA ACATTTTAGG GTGCTTGTGC AGTGAGT

### SEO ID NO:284: (Length of Sequence = 340 Nucleotides)

CTITIGGAAAT GIAAATTGIT ACAAACTTAC TITIAGAGCAA ATTTAGICAT CCITICAAAAA TITIAAATGIA TACITATITIC CTAAGAATTC GITTGGCTCA CACAATTGIG AAAAGATAGA TGIACACCAG TGITCATTAC AACAATTATG CAACAAATCT ATTATGIGCC AGACATTATT CGGAACTCTG GGAATACATA AGIGAACAAA GCAGATTCCT GATCTCAGGA CCTGGGGTCA GGGGTCAGGA GAAGCCCAAAA AACACGCTNG AGAAATACTT TATGCAGTGT GGGGGGAGTG CTACCAGCAG AGCAGGGGAT GCAGATGTGA AATCTTGIGT

#### SEQ ID NO:285: (Length of Sequence = 335 Nucleotides)

GACATTCACG GAGGIGGGIT CGACCTCCGG TICCCCCACC ATGACAATGA GCTGGCACAG TCGGAGGCCT ACTITGAAAA
CGACTGCTGG GTCAGGIACT TCCTGCACAC AGGCCACCTG ACCATTGCAG GCTGCAAAAT GTCAAAAGTCA CTAAAAAACT
TCATCACCAT TAAAGATGCC TTGAAAAAAGC ACTCAGCACG GCAGTTGCGG CTGGCCTTCC TCATGCACTC GTGGAAGGAC
ACCCTGGACT ACTCCAGCAA CACCATGGAG TCAGCGCTTC AATATGAGAA GTTCTTGAAT GAGTTTTTCT TTAAATGTGA
AAGATATCCT TCGCG

#### SEQ ID NO:286: (Length of Sequence = 399 Nucleotides)

GCACAATTAT TAAAAAGAGG CCACTTAAAT TCAACTCTCC ATGGATACAG TGTCTGTGGC AATGTTTAAT TAGAGATTAA
AATTGAGGAA TTGAATAATT GAGGTTGCTA ATGAATTTGA AAACTCAGCA AAGCAAGGAG AGCTGAGCGT TTTTCCGACT
TAGCTTTTCT TTCTCTAACC CTTTTCTCAT TTCCTACTAT TATCACATNT CTGGCCTTGA CTGCTGAGTT TATTACTACC
CATAACCCTG GCCTAAGTGG AAACAAAAAA GCTGTAGCCT CTTTGCTGAG CTCCTGGAGA CATTTGGTCT ATTGGATTTA
TGACATGTTC AGAAGCTTGC AGTTGCAGGA GGCTGACAAT GATGAAAATG AGATATGVIG GGCCACCACG CTTTTCTGT

#### SEO ID NO:287: (Length of Sequence = 294 Nucleotides)

TTCCAGTTGA ATTCACCAGT GGACAAAATG AGGAAAACAG GTGAACAAGC TTTTTCTGTA TTTACATACA AAGTCAGATC
AGTTATGGGA CAATAGTATT GAATAGATTT CAGCTTTATG CTGGAGTAAC TGGCATGTGA GCAAACTGTG TTGGCGTGGG
GGTGGAGGGG TGAGGTGGGC GCTAAGCTTT TTTTAAGATT TINCAGGTAC CCCTCACTAA AGGCACCGAA GCTTAAAGTA
GGACAACCAT GGAGCCTTCC TGTGGCAGGA GAGACAACAA AGCGCTATTA TCCT

### SEQ ID NO:288: (Length of Sequence = 391 Nucleotides)

TCTACAGATG AGGAAAGCAA GCCTCAAGCA AGGGGGCCT GATCCTTTCC CTGTTCCCTG TGTATTCCCT GTCTGTGGCA
AAGCCCATTG CCTTGATTCT CTTCTCTTTA CTTTCATGTT GAGAAGTAGT TTCTTTCTGC AGTTTATTTA ATTTACTGGC
AAAATGACGT ATTTTTTTTT CAGCAATGTT TCAGCTAGAT ATTTGCTTTA TGCATGTAAT GTCAATGAAG TACTCATAAG
TTTTCAAGAA ATGACTGATA TAAATCATGT GTTCCACTAC ATAGTCTAAA TATTTAGTAT TTGGTCATCT ATTTTAATAT
GTTCAAAATTC TGTTAAACAA GNCATAGTCA CTATGTGAAG ATAAAAATAG NCAAAGTTGC ATTATGACTT T

### SEQ\_ID\_NO:289: (Length of Sequence = 198 Nucleotides)

CTTATATTCT ACTITATITG GTAAAACTCA GAAACTAACA ATTCACATCC TCCCACCTTC TTCTTTCCGA AGAAGGCAGT TTGCAGAGAC AAAAGGCCTG TGGCGTGGGG ATCATCCACC ATCTCCAGGT TTTACACCCA GGCTACCCAT GGCTTGGCAG TCAGGCCTCT AGGCTGATTG CTCTCAGAGG CAATAGAA

SEO ID NO:290: (Length of Sequence = 353 Nucleotides)

GGITTICATO TICGGITIAC AAAAGICCIA CIATITATIT ATTITAACIT TAATITAAAT ATCACCIACO TIAGGIAGAA GITTICCITT GIGIAATATA ATATAAAACO GACATITICIT GGGGGCATAA TAGIAAAGAT GITAACATIT TITIGGITCIT TITIGGATGCI GIATITIGIGC TICTICTIGAA AGIGATGIGI GCCAAGATGG CICATGIAAC CCAGITTIGA CIAGGCIATT GATATTCIGI CIGGITAATT TATIGAACIG GCTAAAGCT ATACATATIT CCITTIAGNIGIAA GATATTCIAG ATATATTGGI CIACIGATIC ATAATATCAC TGG

SEO ID NO:291: (Length of Sequence = 163 Nucleotides)

CCTGGTAGGC CIGCTACACA GICTTGCAAC GNCCCTCGTG CTTGGGCTTC TGCGGTGAGG CAGGGGGGTC TGCTTGTCTT
AGATGTTGGT GGTGCAGTCC CAGGACCAAG CTTAAGGAGA GGAGAGCATC TGCTCTGAGA CGGATGGAAG GAGAGAGGTT
GAG

SEQ ID NO:292: (Length of Sequence =397 Nucleotides)

ACGGGAAGGT GAGTATGINA GTATGINTOC CAGACAATGG TGTTTCCATG TCAATGGAGG TTTCTCAGAG AGAGGTGATC TGGCTGAGA AAGCTTAATC TGGTGGCAAT GGACAGGTGA CTTTAAGAAG TGGGGAACGA GGGAAGGAGG CCAGTTTGAA AATNATAACA AGGGTCCAGA CTCAGTGATG CAGCAGTGAC CATGAGAACA GAGCAGCTGC AGGTAGAAGA TGGAGACAGA ACTNGGGAGA TCTGGTGGAG GTAAGCCGC TGGAAAGATG ATGTCAGGTT TATACCTAGA GGACACATGA TCCATTCACA AAGCCAGGGG NAACCTAAAG AGAAAACACT TAGAATTTTN GGAGAANAGG CTAAGGCTGG GCCTTAGACA TGGGCTG

SEQ ID NO:293: (Length of Sequence = 360 Nucleotides)

GAGGIAAAAT TIACATACAG TGAAATCCAA ATCITAAGIG TACCACTAGA TAAATTITGA TAAATGCAIT ATGCCTGGTC
TTCACACACC CTTTTCAATA TATAGAAAAT MICCAGATAA TITATTITGT TGTTTTTTC ACACACTAAG TTCTAGACTT
TTCCAGGTCC GAGGGAACTA TIAGGGGGGA AAGTACTTGT NATAGIAAAA AAGATTTTAG GTGTGTTTGT TTTTAAGGTG
CAGAAACACA TOGCAGATTT AAGGTCTGCA ATCICTGCTT TTTGTTATTG TTCCAGTTTT GATCTCAGTG ACATTACAAG
CAAGCAGAAA CACTCAGACA TGAAATGGCC CAG

SEO ID NO:294: (Length of Sequence = 321 Nucleotides)

TTTTTTCAG GNITCAACCE TITTATIGG AGGITTIGIT TICIGIGAAA TACACIAGAG GGIGGGGAAG GGGACACATT
CACITTGCAA GATAAGGGIT TCCCACCACT AAAGGAAAGG CATGGGGCAG GGCACACTGG GGITTGGGIC CGITTTCCCA
CCTCCTTCTG CTTGGCTCAC TTTTCTTTTC TCTCAGCAAG TACCACAGAA CACAAAGACA AGAAACAAAA CAGCAAATCA
ACCTCCAACG GGGCCATGCC AAGCCTTCCC CACTCCCCCA GGCTGGGCAA GGGCTGGGAG GGGCTGGGG CAGCTCACTC
G

SEQ ID NO:295: (Length of Sequence = 165 Nucleotides)

GACACACAGC GCCTCCGGCC CCGCACAGGG GGCATGTCCA GAGGTGCTGT GTGTCACCAA CTGGTCTTCT AATTTGGAAG GAGTTGGAAA GGCCTTTTTG TTGATGAAAA GTTGGAAACA GTGGCACATA TCTNAGAGGG AGGAACGAGG CAGCGTGGTG AAGCG

SEO ID NO:296: (Length of Sequence = 315 Nucleotides)

CGAATACAGG TAGTGCCCAG CTGGTTGGGC TGGCCCAGGA AAATNCTGCT GTGTCAAATA CTGCTGGCCA GGATGAAGCC ACAGCTAAGG CTGTGTTGGA GCCCATTCAG AGCACCAGTC TAATTGGGAC TTTAACCAGG ACATCTGACA GTGAGGTTCC AGATGIGGAA TCICGIGAAG ACTIAATTAA AAATCACTAC ATGGCAAGNA TAGIGGAACT TACGICICAG TIGCAGCIGG CIGACAGIAA GICAGIGCAT TTTTATGCCG AGIGCCGAGC ACTGICTAAA AGACINGCCT TGGCIGNAAA GICTA

SEO ID NO:297: (Length of Sequence = 244 Nucleotides)

AGTACGGTIN NCGCINAAGC TIGATNATCG RATTGCCAAT CINCATATIT GIGITAGAAT CATTTGTTT TGIGTCTTCA
TGITTCTATA AGATAGGACC AATATTCTTT ATTGGGCTTT GATTTTATTT TGIAACTTAA ATGTATTAAG GCAATAAATG
TAATTTTCCA CINAAAACTA TCATTATAGA TTTGGTTACT ACCTACIGCT CAGCAATTTT TTTTCTTATC AAAATTCTTC
CTGG

SEQ ID NO:298: (Length of Sequence = 152 Nucleotides)

CCTGAACAGG TAATGAGAAA AATTTACACA CAAGTGATTT TGAAAACAGA ATGGGTTGCT TACAAATTAC AGGAAATGTT ATAACACAAA CCAGAAGAAT TCAATGGAAG GCAATAAGGGAAAT GAAAATTATA AAAGTATCAN GA

SEO ID NO:299: (Length of Sequence = 374 Nucleotides)

CGATGITITI AATGICATCA CACGITGICI CAAAATGAGI GGIGGCATCA TAIGIGCGG AAATAAAGAT CIGGCTTICT
GITCCCAAGI CITTIGGIAC CAGGAGGICA CIGAIGCIAA CAAATTICIG TICAATIGGI TCCAAGAGCT CCAAAGCIGG
TCIGATITCC TICICAGGCI CCTIGGITIC CACAGITGIA CIAACIATAG CAAIGIACIT CCCTIGIGCI GCIACATIGI
GCGCAAAGGA GATCATGCAG ACGIAGATAT CIGACITICG ATTGACTITG GITCIGIGGA ATAATGATCT GGCAGGAGIT
GGCATCATIG GIGITCITIG ATGGGGGIGG CIGAGGGAIG CAAATAACCT CTIG

SEO ID NO:300: (Length of Sequence = 365 Nucleotides)

GGCTCACCAA GCTCAGCAAG TACGTGTACT TCTTCGAGGC CTGCCGGCTG CTGCAGAAGA TGATTGACAT CTCCCTGGAT
GGCTTCCTGC TGACTCCGGT GCAGAAGATC TGCAAGTACC CTCTGCAGCT GGCCGAGCTG CTCAAATACA CGCACCCCCA
GCACAGGGAC TTCAAGGATG TTGAAGCCGC CTTGCATGCC ATGAAGAACG TGGCCCAGCT CATCAACGAG CGGAAGGGTA
GACTTGAGAA CATCGACAAG ATTGCTCAGT GGCAGAGCTC CATAGAGGAC TGGGAGGGAG AAGGATCTCT TGGTCAGGAG
CTCAGAACTC ATCTACTCGG GGGGAGCTGA CCTCGGGTTA CACAG

SEO ID NO:301: (Length of Sequence = 224 Nucleotides)

GGTATICAAA CAAATAGCCI GAGAATIING GGGGGATCIG AAATAGAGIA CTATGCITATG TIGGCTAAAA CIGGTGTCCA TCACTACAGI GGCAATANIA TIGAACIGGG CACAGCATGC GGAAAATACI ACAGAGIGIG CACACIGGCI ATCATIGATC CAGGIGACIC TGACATCATI AGAAGCATGC CAGANCAGAC TGGIGAAAAG TAAACCITIT CACG

SEO ID NO:302: (Length of Sequence = 363 Nucleotides)

AGTITCACTO TIGITGOCCA GGCIGGAGIG CAATGGOGIG ATCTOGGCTC ASTGCAATCK GCACCITCOG GKITCAAGCG
ATTCTCCTGC CTCAGCCTCC CAAGTAGTIG GGATTACAGG CATGCGCCAC CATGCCCGGC CAATTITKTA TITITTCGTAC
ACACAGGGTT TCTCCATGTT GGTCAGGCTG GTCTCAAACT CCCAACCTCG GTGATCCGTC CACCTCGGCC TCTCAAAGTG
CTGGGATTAT AGGCATGAGC CACTGTGTCC GGCCAGCTCA AACAATTITA ATGCTTCTT CAAGNCTATT AGAAACCTTT
AATTGCTTCT TAAGTTTCTC CCCCAACTAT GGAGGAAGCA TAT

SEO ID NO:303: (Length of Sequence = 253 Nucleotides)

ATGCAGGAAS ATCTACCARG CAAATCGAAA ACAAAAAAAG GCAGGGGTTG CAATCCATCT CTCTGATAAA ACAGACTTTA
AACCAACAAR RRTCAAAAGA CACAGAGARG GCCATARCAT AATAGTAAAG CGGATCAATT CAACAAGAAG AGCTAACTAT

CCTABATATA TATGCACCCA ATACAGGAGC AACTAGATTC ATAAAGCAAG TCCTGGAGGT GCCTACAGAG GAGGCTTAGG CTCCCACACA TTA

SEO ID NO:304: (Length of Sequence = 416 Nucleotides)

TTITITIGAG AIGGAGIACT COCCICITIG COCCGGCTGG AGIGCAGIGG CGCGATCTCG GCTCACCTGC AACCCCTGCC TCCCCAGTIC AAGAGGITCT CCIGCCTCAG CCTCCCGGGT GGCTGGAATT GCAGGCACAC ACCACCATGC CCAGGCIGCIT TCTTGIATTT TTAGGGAGA CGIGGITTCA CCATGITGGC CAGGCTGGTC TTGAGCTCCT GACCTTAAGT GATCCGCCAG CCTTGGCCTC CCAAAGIGCT GGGATTACAG GCGIGAGCAC CGIGCCCAGG CTGTTTTTTA ACTGACTTTG GATTTTACTC CCTTTCTATG CAAATTTATT TTAGAATCTG TTCCTTAACC TTAGGGGGTT GGGTTAGACA AGITTCAAGG GAGCCTCAAG TGKAAATTGC TTAAGG

SEO ID NO:305: (Length of Sequence = 223 Nucleotides)

CACACCCAGC TAATTITTGT ATTITTAGTA GAGACGGGGT TICACCATGT TGGCTTGGCT GGTCACGAAC TCCTGGCCTT
GAGTGATCCC CCTGCCTCAG CCTCCCAAAG TGCTGGGATT ACAGGTGTGA GTCAGCGTGC CCAGCCCAGA TTTTATTGTT
TTAATTACAA ATTITACGTT AACTGATTCT GCACATTTAT ATTTGCACAC TTGTGCTAGT GAG

SEQ ID NO:306: (Length of Sequence = 169 Nucleotides)

GITTIGCCAC AITGGCCAGG CIGGICIOGA ACTCCCGACC VVGIGAGCCA CCIGCCIIGG CCICICAAAG IGCIGGGATI ACAGGCGIGA GCACCACGCC CGACCCAIAG CICITIACAA CIGCCIIGIA AAGAAAGCAI CATIIGGCAC IGIIAGIAII TCICIIGAA

SEQ ID NO:307: (Length of Sequence = 303 Nucleotides)

GATTIGGTAC AGAGTATGIC AGGAAGACAA CICAGATIGC CATTITAAAT AAAGTIGTAC ATGAACAATA ATTGGAATCA
TCAGGTAATT TITITAAACA AAGGTICTIC ATTTACTGIT ATGATTGGAA AAAAAATTAG AAAATAAAGT AAGTSCCATA
GGCTAATTAA AAAATAAAAC CITGGCCGGC CGCGGTGGCT TACGCCTATA ATCCCAGCAC TITGGGAGGC CGAGACGGGC
AGATCACGAG GTCAGGAGAT TGAGACCATC CTGGCTAACA CGGTGAAACC CCATCTGTAC TTG

SEO ID NO:308: (Length of Sequence = 143 Nucleotides)

ATCTAGGAGG CTGAGGTGGG ATCGCCCCAG TACTGGAGGT CAGGGCTGCA GTCAGCCATG ATCATGCCAC TACACTCCAK
CCTGGGTGAC AGAGTGAGAC CCTCTSTCAA AAAACCTCAG TCAATVCAAA CATACAGTAT ATT

SEQ ID NO:309: (Length of Sequence = 199 Nucleotides)

CCCACCCTCA TAANCCCCAC TOGGGAGTCT GOGGGCCTCT ATTGCCATGT GCCTGGAAIN ATNATATGCT CATCACTTTA
TGAAGAATAA AATTTGINIT TCCTGCCTTA AAGITACATT CGTTCTTCCG CTCAAATCCT GATCTGGTCC ATTAAAGAGT
GTTCGCAGAC AAAGITTCTG AAAGATTAGA GAAGAATCC

SEQ ID NO:310: (Length of Sequence = 426 Nucleotides)

TCCCTGTACC ACCTCTTCCT GAATACGGAG GAAAAGTTCG TTATGGACTG ATCCCTGAGG AATTCTTCCA GTTTCTTTAT
CCTAAAACTG GTGTAACAGG ACCCTATGTA CTCGGAACTG GGCTTATCTT GTACGCTTTA TCCAAAGAAA TATATGTGAT
TAGCGCAGAG ACCTTCACTG CCCTATCAGT ACTAGGTGTA ATCGTCTATG GAATTAAAAA ATATGGTCCC TTTGTTGCAG
ACTTTGCTGA TAAACTCAAT GAGCAAAAAC TTGCCCAACT AGAAGAGGCG AAGAAGTTCT TCCATCCAAC ACATCCAGAA

--

TECAATTOGA TACOGAGAAG GTCACAACAG GCACTOGTTT CCAGGAAGCG CCATTTACCG TTTTTMATGG GMCAAAGGGA GTTACATTOG CTATGGCTTT TOGAAG

SEO ID NO:311: (Length of Sequence = 489 Nucleotides)

TOGACTOGGT CCTGGATGTG GTGAGGAAGG AGTCAGAGAG CTGTGACTGT TTCCAGGGCT TCCAGCTGAC CCACTCTCTG
GGGGGCGGCA CGGGGTCCGG GATGGGCACC CTGCTCATCA GCAAGATCCG GGAAGAGTAC CCAGACCGCA TCATGAACAC
CTTCAGCGTC ATGCCCTCAC CCAAGGTGTC AGACACGGTR GTGGAGCCCT ACAACGCCAC CCTMTCGGTC CACCAGCTGG
TGGAAAACAC AGATGAAACC TACTGCATTG ACAACGAGGC CCTGTATGAC ATCTGCTTCC GCACCCTGAA GCTGACCACC
CCCACCTACG GGGACCTCAA CCACCTGGTG TCGGCCACCA TGAGCGGGGT AACACCTGCT TGCGCTTYCC GGGCCAGCTG
AACGAGACCT GGCAAAGTGG CGGTTGACAT GGTGCCTTTC CTGGCTGAAT TTTTAATGCC CGGTTTGGGC CCTACCAGCC
GGGGGAAGCA

SEO ID NO:313: (Length of Sequence = 302 Nucleotides)

CTICICATGC CAGICTAATG ATTGITTITA GAAAAGGATA TACATTGACC TTCAATGTAA TAAGAAATGC AACACTITTAC GGIGICCAAC TGCTAAGATT TATTTCCAAC TTGTCAGACA CAACTATTTT GCCCAATCCA AATCAAAGGG AATCAAGGCT GTGAAATCCA CACAGGACAT CAACGCACAC ATAAATGAAA ACTACAGATG TGTCAGAGGC AACCATATAC ACACAAATAA TGTAACIACT AAATTCCATG AAGTAGCTGT CCAGGGAATA CTITCCAAAT AACCTTCAGC AG

SEQ ID NO:315: (Length of Sequence = 339 Nucleotides)

CGCGTTATTT AAATTGTGAA AAATAATGAA TATTAATTTG GAGCATAATA TITAAATACA TGAAAAAAGC TGGCTGGGAA ATGTTGGCAT GACTTTTCCC AGATGTTAGC ACTGCTTCAA CTTTTGAGAG NGCACTCTGA GTGTAAGTTT ACTAGACTGA CATTACTAAA ATCATTGGTG CTATAGAGGC AGGAGAATAC GGGGAATAAG AAAGCCAGTT GCAAGCCAAC AATCCTAAAA CTCCTCCTTT TGCCATGGAC TGACGGCATA TTAAATGAGA TCATGCATTT TAAGGATATA ACAGTGTACA CCACATGTGC GTGTTCCAAT AAAAGGAAG

SEQ ID NO:316: (Length of Sequence = 430 Nucleotides)

TAAGERIGGIG GIGCIGITCI GGATGCTICC AGIGGGCCCC GACCAGGICI GGACAATGCC TGGCGCCCG CCCCCGCCCC TCTCTACAC ACACGCAGAA MITCGGAGCT CCATGGGGAA CAGAAGCAAG ATATCCGTAA AATCAAAGTC TAGGGGGTGG GAATGAAAAAG GGAAAAGTGA GGAACGGGA GCCAAACCCA GGAAGACGCC TCTTTTCCTG CACATTCCCT CTCCTTTATA TACTCAGACCC TTGGCTGTCI CCAGTATGTA CCCACCCTGG TCTTCCAAGC TGGGAGCCAC TTTTTATAAC ACAATCACAG TTTCACAAAC CCCAGGAAGG TTCCATGTGG MGAGAGGTTA AGTTTCGNCC TTGTCCGGGG AATTATGACA CTCAGAATAT CCCCTTTTGGT GTAAATGGAA GACAACCTTT

SEO ID NO:317: (Length of Sequence = 317 Nucleotides)

GTTAATGCTT CTNATACCTA ACAAATCCTG GAGGGCAGNC AGCACCAACA CTCAGGGTGC TGGGAAAAGG TGCGTGAGAG ATCTGAGGCA TCTCGGGGGC AGGGGAGGGC TGGGAAAGGCA GGCTGGCTMG GACCCTCGCA TCTTAACCTA ACCTTGACCC TCTTTCCATG AGCAGAGTTC CGATGCCCTG GAAGCCTGGG AGAGTGGGGA GAGATCCCGG AAAAGGAGAG CAGTGCTCAC CCAAAAACAG AAGAGTGAGG CTTCCAGGGT GCAGCAGGGG TGGGAGGTGA TCAAGCAGCG TGGGGATTGT AAGCCCG

SEO ID NO:318: (Length of Sequence = 407 Nucleotides)

CTCGCCCCGC ACCTTCCCCG CCTATGCCCC TCGCTGAGAT AGGCCCTTCC CTCCTCCGGG AGCCTCCCGG GCCACGCGAC CCTCAACTTC TCCAGCCGCT CCACCCACGC TTCCTGGACC GCCTCCLGCA GGCGAGGCTC ACATCCAGCA CTGTCCCTTA

CAGICGCCAT GCCCCTGGCG ACCTCAGTGT CCCACTCTGT AAGGGGACAA TGCAAATCCC TTTGCCTCAT AGGGTGCATG
TGCCAGTINTT GATAAAGTGC TGGCCACAGG CCCTGCCTTC CCAGGGCTCA CAACACTGTG TCCCTGACAC ACCCGTGGGC
TGTAGTGATT CINTTCATGG GGATTTGACT ATAACCNGCA GTCAGGAATG AATTTCACAN CATAGCTCAG TACATACACA
CATATCT

## SEO ID NO:319: (Length of Sequence = 382 Nucleotides)

CACTGCACAC CIGCOGTTGG GGACAGGACA TGACTAAGCA CAGAGCTTC TTCTTTTGAG GCCACGCATG TGGTGCAGAG
CGGGACCACC TGCATCCACA CAGCCCGGCG CACCTGCTCC TACTTCTGCT TAGCGTGTGA GCAGCTTGGT GACCAGGGTC
TCCACCAGGG GGCAGGCCAG GACCGGCTTA CAGCACTTTC TAGGGGTTCT CTGGTCCCGG GCTGGGACAC ATACAGGGCT
TAGTAAAGTT CATAGATGGT AGCTAGGCAG CCCCAGGCCC CAGGTGACAC CTNTCCCCTG CCTGNCCTGT ACTGNCTGCC
TGCAGCACTC CTGGGAATCT TGTACGAAGA CAAGGAGAG CAGGACTTCA TCTTCACCAT CT

#### SEO ID NO:320: (Length of Sequence = 368 Nucleotides)

CATCCGGGGC ATGGACAGCC CCCGGGGTGN CCGCCCGCNC CCCCCTCGCC GCGTCGCGTG CNGTTCACCA GGCAGCACCT
GGACAGCTCC AGAGTCGGGG AAGCGCCATG GTTCCTGCGC AGAAAGGATG CGGGTTGGGG CCGGCAGATC CTGCCAGGAC
TAGGGGGCCTT CCCTTTCCAT CAGGAGCCTG CAAGAGAAACA AAGAAAACAT TAGAGGGGCT TCTGTGTAGG GGGAGGGCAA
GTTGAGTCTA TCTTTCCTCT TGTAGGTACT AATTAAACAC CTGCTGTNTG CCTGGTACTN TGCAGGGTGG GACAGGCATC
ATAGCAACTC ACAGTGGTCC CCTCTTCTTT GTGCCCATAG TCTAGTAG

### SEO ID NO:321: (Length of Sequence = 355 Nucleotides)

GGGGACTGT GCTGTTGAAC TGAGCTGAAC TGGGATCAGG AGAAGGAGAA GTGGGGGATTG AGCCCCTCAC CTCCACACAC
TCCTCTCTGT GCCTGAAATT CCTCCATTAA GCAGCATCGC TGTCCCCTGT AAACACCCAC ATTAAGCCAT TATTCATCTT
ATGGCTTNAG TAGGCGTTAG TCCCTCAGAT CCTTTCCTGC TGAAAGCGGA TCCTGATAGA GAGAAGGGAA GAGAGATGGA
TGGNTCTGGG GACGCCAGGC TGGTCCAAGA GTGGGGAGGA AAGATGTCTC TCGGACTCTN GGGNAAGAAA TATTTTCTGG
GGGAATATGG AGGCACCANA GGCAAGCTCA AGAGG

#### SEQ ID NO:322: (Length of Sequence = 225 Nucleotides)

CTCTCACTTC TCACCAGGCA CCCACAAAGC CCCCAGGCAG CTCCATCTTT CCAATCCANT CCCATTATCC CAATCTCTAC
CCCAGGATCC CCCAAACTCC TCCCACTTCA CCTCTGCCAC AGACCCGCTC GCCCCCAAAC TTCAGCCTNC CCTCATCTGC
CCTNACCACC CACAGCCCCCT CCTACCTAGC CCTCTCCCGC GACGGGCCCCC ACATT

## SEQ ID NO:323: (Length of Sequence = 250 Nucleotides)

CTCTOGCTCC TGTCCGTGAC CTTGCAGATG CAGGTGACAG CCTGCCCTTC CGTTTTTNTC TTTCCAGTCC CGCCTGCCGG
ATTGGGTTCC AGCCCTGCCC ACACGCCCGG TACATCCCGC CTACACTCAC CGATGTCGCC TAGCAACCCG GCTCGCCGCC
AGCATCCGCA ACCGAGGTCC CCGCGCTCCA GTTCTCTGGN GGGGAGGGAG AGGGGTGTTG CTTCTCCAGC CCCCTGCAGC
CTGGTGTCTT

#### SEQ ID NO:324: (Length of Sequence = 338 Nucleotides)

GINTICITAT GCGGATAAAA TITCINAGGI AAGAAAAGIT AGCICIGAGC AGCCCTCCGC CIGATACIAA TACITTACCA ATGGAGATTT TCCTTTTCTT TTCTGTTTTT GAGACAGGGI CTCACITTGI TTCCCAGGCI GGAGIGCAGI GGIGCCATCA TGGATCACIG CAGCCTCCAT TTCCCTGGCT CAAGCCATCC TCCCACCTCA GCCTCCCGAG TAGCTGGGAC TACAAGGIGT GCACCACCAC GACTOGCTAA TITTTAATIT TITNNIAGAG ACGGGGGTTT CCCTATGTTG CCCAGGCTGG CTTGAATTCC TGGGCTTCAA GTGATCCT

## SEO ID NO:325: (Length of Sequence = 461 Nucleotides)

#### SEO ID NO:326: (Length of Sequence = 391 Nucleotides)

GECCCTCCAG TETCCTGCAG AGAGGCACTC TTGCCAAGTG TCATTGATGA CGCAGCTGAA AACCAGAAAC ATTTCACTTT
CCAGCCACGA GACTGCAGCA ATCTGCTCTT TGGACTGCAC TTAGGGAAAC CGAGGCCCAG ATAACTGACC CCTCAAAAGC
CCCCAGGACG GCAAAATCAA AGGGGCTGAG GTGCTCTGAA CAGCCCCAGC AAATTAAACC ACCTAACTTT GCGCTACTCC
CACTGCCCTG AAGCAGCCTG TGGTGGGAGG TGGGGGTGGA TACAGTGTTA CAAAGAGAAA CCTGAGTTGT AGCCATAGAT
TGCTAATCAG TAACAAAATA TCCCTCTAAA CCCAGTCCTG CCTTGAACCC ACAGGCTCAG GATGGTAAAT A

## SEO ID NO:327: (Length of Sequence = 438 Nucleotides)

TACTGACTGA CCCTGG: GATTCCCAGC CGAGACGITT CTGCTCCATT CCGCCAGGAG CTACCTTCCC GAGCCGCGCT
TTGCTCACCT GTAGGAG: TAGAGGGAAA TAAGACAGCC CTTCTTAGGA TGGTGGAGTG GCTAGAAAGA AGCAATCCAC
GCCAAAGGCT TAGCTCAGT: CCTAGACTTA GTAAATGCTC AATAAATGTC TGCCATTGTT ATTATTATTT ATNATGCTTC
CAGCTGGCCT GGAAGGAGGG TTCTGGAGCC AGAAGGGACC TTGGAGGAGC CTCGGTTAAA TCTCTAGCGC CATCTTTATT
TTTAGGATGG AGTAACTTGC TCAGGACCTA CATCTAACAT TGTGGAGGGG ATGCGGTTTT TAAGTAGGAA TTCTTNGACT
AGACCTCTCA GCAACCCTTT CCTNTCCGTG ACAGTGGG

## SEO ID NO:328: (Length of Sequence = 400 Nucleotides)

TIGCCCICTC GGCCTAGAAG TCTCCCATTA TGGTGCTGTG TCTGCTGGGA CCCACGGGGC GCTGCACAGG GAACCATGTG
GCCGTGAACC TCAAGTCCNG NCCAGCAGG GTCAATTGTC TCAGNCCACC CCTCCCTACC CCCAGTATCC TCTCTCCTTT
ATAGATCATC CATTAAGTGC CAGACACTGC AGAAGGCACA TTGACTAATA TTAAATATTA GCCCAGCTAC CCTGCTGGGC
TGTCCTTCTT AGAAATGAGG AAGTGGAGG TTAAGTGGAT TTCTCAAGGT CGTGCAGCTG GTAAATGGCA GAACCAGGAT
TTGAACTCAG GTGTGCATGA CTTCAAAGGA AGACACCACT GAGGCCTCCT CTANTGGGTC TGCNTCCCTA CCGGCCCTGG

## SEO ID NO:329: (Length of Sequence = 227 Nucleotides)

GGCTGGGCTA AACTCCAGAC GCTGGCCACC TTCATAGGGT GGAGATGACA GAACAGGACA GGAGCCATGG GGCTCCCGGG GCGGGTAGGG GTGGGTCATG TTCCTTGGCT TGGGGGCAGT TACAAGGGTA CAGTGGGGCT TGTTGAAGGG CAAAAGTTCT GTAAGINCGT CCCNACAGGC CAAAGAAACC CCAGAGCCGT CTTTCGACTG ACTACAGCCT GGAAGAG

## SEQ ID NO:330: (Length of Sequence = 401 Nucleotides)

TGAAAATATA TCCACTGITC AGAGGGACAA CAAAGGCAGI TAGACTGTCC TGAACGGTCC TGCCTCAGGC TGAAATTTTT GTAGCACTTG ATCAGTTGCA AAGTGATCIT CCCTTTAATA TCTCATTTTA TCATTGGGTA TCTGAAGAGG AAGTGGAATT GGGGTAAGAA TTTAGGTTCT TGCCATAGCA TTTGGGTGGC CAGGGTAAGC CTCAGGGTGG AGGACCCTTA AAGAAAACTC TAAGGATTT AAGGAGAGIC AAACTCIACA TICATCCAGG CAAACATCIA CICTICCATT GATTAATGGN TCCACTCATC
CGIGCAACAC ATTCACCCIT TCATCCATCC ATTCATCCAT CIATCCINCA TCAATCCATC CAIGIATCIT TCATTCATCC
A

SEO ID NO:331: (Length of Sequence = 322 Nucleotides)

CCCAACGITG CCCCGCCTTT GTCTCCAGCG GACTGGAAAG AACCCACCAT TGTGAAGCAC AGAAAATTGC CCGCACTCTT
ATTGGCTAGG TTCCCCGACT TCCGCTCTG GTTGGTGGTT GGCTTTGCCT GTTACCTGTG TTGCCCACTA CCACTCGCTC
CGCCGAGCCC CAAGGATGGA TCGCTATCCC GTAGCCGGGT GTTCCCGAGC GCTGCGGGCA AAGCAGACCG CCTTGCGCCT
ATTATGGGTT GAGTGGCTCT GTACTCTAGA TCGGCTCTGT CACTTACTAA TGGGCCGTGT TGCCTTCGCG ACTGCAGGTT
TT

SEO ID NO:332: (Length of Sequence = 441 Nucleotides)

GECTCAAGNA ACCIGCACIC TIGCACICIG GCCITCICCC AGGCTGAGCI TIATCATATC ATCAGCAGCA ACCIGGAGAA
AATTGICAAC CCAAAGGGIG AAGAAAAGCC ATCIATGIAC TGAACCCGG ACIAGAAGGA AAATAAATGA TCIATATGIT
GIGGIGGGATIC CCTTCTGGCG TGIGICATIC ATTCAAAAAAG CATTIATIGA GIGGCACCTA TGICCAGCCT GAAGATGAAT
GIGGIGGGAA GGGGIGGGIG TCACAAAGAC AAAGATGACT TAGATGCCCA CIGIAATCIT GACTGTGAGA AAGAGGGGAT
TCAGGCCCTT TCTCATCCAG TAGICAATGI GCCATCTCCC CTTCCCTAGT CACCICTTAT CTTCACTTAC CTTCTTTCTT
CTCCTGCTTA TCTGTTTTCC ATCIAAGGCA AAAAGGGGGGG

SEO ID NO:333: (Length of Sequence = 354 Nucleotides)

AGAAGCGTAG ACCGAGTAGC TIGAGCGCCT CTTCCGGTTA CCTTTTCCCA GCGCCAGAGG GCCTTAGGGT TGGGGTCCTC
GCTCAGGCAC AGAGNCCCGA CACCGAGCGG CGCCTTCCCC GGGATCGAGG GACGCGCACG CCAGAGGAGA CGAAAGGAAC
CCGGGTCGGA CCAGATCGGA ACCACTGACC ATTGCCCATG GCGGCCCTAG TGAGTNIGGA TTTNGCCGGG TTCCGGGGGTT
CCGACGGCGA CCTCGGCGAC CCCTCACTCA CCGCTTCCTC TTTNCNCAGG GNCCTAGNAG CCAGAATGTC ACTGAATACG
TMGTTCGAGT TCCTAAGTAA GTCCCCAGGC CCAT

SEO ID NO:334: (Length of Sequence = 196 Nucleotides)

CTCCCGCTCC GCACCCGCCT TTCCCGAGCA GGCTACACCT CTCCCTGGCG CATCTTTACT GGAAAGCCGG CAGNGCINGING
GGAGAAGTGA GCNCCGTCTC CGCGCCTCCT CGGTCCTGCT GGCTGAGCGC GGGGATGGCT CCGGAGGGAG ACACTCAGGA
AACCACCTCC GCCCTTCCCC CATCTTTATC CAGCGG

SEQ ID NO:335: (Length of Sequence = 261 Nucleotides)

TOCGAGAGCT GTCTGGGGCC AACGTGCTGG CTGAGTACTA CTGGCTCANA CGCCGCCTGC TGGGGGCCCC TGGAAATNTA
AGTCCTGCCC CGGGCTGTGC CGCCCTCCTC CCTGANAGCC CCCTGCNTCC TGGGCACAGG GAAGCCTCCA TAGGCTAGTA
GCATCACAGT GCCAGGCCCA GAGCTTACTG GACTTCCCAA GGTCCTATGG GACTAGGGCT GAGGGTACAC ATCCTGCTTT
TTTCCAGAAT ATAAGTTTTG G

SEO ID NO:336: (Length of Sequence = 191 Nucleotides)

COGRAMAGO CTTCCGCCAC ATCCAGCAGC AGTAGCAGCC GCAAGGNCCG GGACTCGAAG GCCCACCGNA GNCGGACTAA GTCGTCCAAG GAGCCGCCTT CGGCCTACAA GGAACCGNCC AAGGCCTACC GGGAGGACAA GACCGAGCCT AAGGCCTACA GGCGGCGCCG GTCCNTCAGC CCACTGGGAG G SEO ID NO:337: (Length of Sequence = 279 Nucleotides)

CCTTAGGGCT CCTCCTGACT CCTTCCAACT CCCAAGTCTG CAGCCCAGGT AAAGCCAGAG CAGACTNAAG GCAAGTTTTC
AGGAAACCAG GWGCTTGAT CCAGACTCAC AATCTCCCTG CAAAAGTKTT CAGAACACAC CGCACAAACA CACACACGCC
TCACAAAACT TCTGAATGTK GCTCTGTCTC CACCTTCTCC AGTCACCGAA AGACCTCGGC CTGAATTGGA GCCCGCAGCC
GTAGCTGTCC CTMTCCACCT GTMCCCCTCG CGGAGGCTT

SEO ID NO:338: (Length of Sequence = 339 Nucleotides)

CCACNOGTOG AGGGAGGCAA AGGGGCAGCA AGAGAGAGGG AGGAAGCCCC ACTCTTTTAA AACAACCAGA TCTCTTGTRA
ACTGAGAACT CCCTTATCAC CAAGGGGACG GTGCTAGACC ATTCATGAGG GWTCCGCCTC CATGGGCCAA TCCCCTCCCA
CCAGGCCCCAC CTCCAACACT GGAAATAACC TCCCAGCAGG CCCGCCTCCA GCACTGGAAA TAATGCTTCA GCGTGAGACT
GGAAGGGGAC TGATGGAGCC TGGWTGTTTK TCCCCGCCCA GSTCTMACGC TGAACCGTAA TCCCCAATGC TGGAGGCGGG
GCCTGGTGGG AGGTGACTG

SEQ ID NO:339: (Length of Sequence = 334 Nucleotides)

GGCACCGGGC TGTCTCTNGT CCAGCTAGCC TCACAGGGAG TGGCCTCTAA AACNGGCCGG CCCACNCCAT TTGGAAGCTG
TCCCGGGTTT TCCGTGAAGT CCTCCCGGCC TGTGGTCTCC TGGATGTCT GGACCAACAG CTTGGGGATG AGGGGAGGCT
CGGGGGCAAG GGCAGGAGCC CCAGCCAGGC GCTGGGGGTN TGGCTGATCG AAGAGCTGCA CCACCCNGTA GCTGGCCAGG
TGAGTATNGG CGTCCACCAG GTGCAGACAC ACATTCTTTT CCTTNACAGC CTCCTTACCC TGGAGTTTAT AGCCAAACGT
GAGGTCGATC CAAT

SEO ID NO:340: (Length of Sequence = 450 Nucleotides)

GECCCCACAA TOCCCTTCTG GCTCCGGGGA CGGGGGGGGC GGGGGGAAATA ATTTINIGIT TGGTCGTCTC
TGCCCCAGTC CCTTCGCCGC GGGACGGCGA GACGGGAGAA GGTGCGGGAA GCGGGAAGCA GGAGGGGGGG CGCCCGGCCC
TGGCACGCAT AGGGCGGCGG AGAGGGCACG AGCAGGGATT GAGCACCTAC TGTNTGCCTT CACGCTTTAC AAAAGGATTT
TCGTTCGATG TTCACTACAG CCCCTGCCCG GGGGTACTGA TGCCCCATTT ACAGAGGGAC AAGCCGGATT TCGGAGAGGT
GAAGTCACTC GCCGAAAGTC GCACCGCCAG GGTCTGCCGTG ACACCCTAAA GCAGTGTTCA GTTACCCCGG GGAGAGCGCG
ATGAACTTGA ACCCTTGTT GGCTTGGTTC CTGCTCTTGC TCGTTTTTTT

SEO ID NO:341: (Length of Sequence = 192 Nucleotides)

TICAAACCCT GGCGGCACGG CITGTCCCTC GAGGCCCGGC CCCTTCCCCT TCCGGAGAGC CCACCGCTGG GTCCTAAAGC CCACCGCTGG GTCCTAAAGC CCACCGCTGG GCACACCACGG GGAAACCNGG TCTTTCCTAG CTCTTGGNTT ACTTCCTGGA GACTTCTTAA AACGAGAGGA GA

SEQ ID NO:342: (Length of Sequence = 229 Nucleotides)

GIGGIAACIT TITTAAAAAA CATAAATACC ATACAATTCA TCCITTTAAA GIGIGIAATT CAGIGGITTI TGGIATATTC
AGIGITGCAC AGICATCACC ACTAATTCCA GAATATTTIC ATCACNCCCA CGGCTGIATC TCCCAITTCT CTCITCCCKG
CAGATCCIGG CAACCGCTGA TCTACITTCT GICTCTTACA GACITATCIG TTCIGGACAT TTCACATAA

SEO ID NO:343: (Length of Sequence = 229 Nucleotides)

165

TECTOCAGGA AATTEGAGTT CNAGCTGAAG GCCTTGCNGC ACTCCGNGCA CTCGTGAGGC TTCTNGCCCG TNTGCGTGCG
TCGGTGCTGC ACCAGCGTGG TGCTTCGNCC GAAGACTTGC CGCAGTCCGG GCAGCGGAAG GGCTTCAGGC CGCTGTGTGT
CTCCTGGTGG TGGATGAGCT GCGAGTNCGC GCGGAAGGCC TINCCGCAACT NCCTGCAAGC GTAGGGCTT

SEO ID NO:344: (Length of Sequence = 227 Nucleotides)

TOCGCAGATC ANATTCACCC TIGCCAGAGG TCAGGSCCCC CGGCCTTGGC GGCGGGCCAG AAGCGTGACT TGGCCTSCTG
GAATGCATGC CCCTAAACAT CTCTAGACTA GGGGCCAGTKT CCGCCAACCA TGGAGGCCCT CCATCACCAT CCCTGCAGCA
TCACCACCNT CCAACCCCCA TGTCCCCACCC TGGNGNITCC ATACCTGTAG TAAGAGAGCA AACCATT

SEO ID NO:345: (Length of Sequence = 249 Nucleotides)

GOGCAATGIT GICACAGAIG TGIGCAGAIT TISCAGAGGA CATAAGITGG CIGIGAGGWA GAACACAGAG GITSCCIAIT
TTTIAGGCAG GAAAGAAAGC CIGCACITIT CIGIGIGIGI GINICAATAA ATCIGAATAA CACCITGAAA GOGITAAAAA
GCIGAGCACC AGGIGITTIC TITCCACITIT CCAGAGIAAT TIAAGCACAC NSCAAAGITA TCICCCITCC TTCCCCACGA
GCCAGCITA

SEO ID NO:346: (Length of Sequence = 356 Nucleotides)

ACCIAGICCE GCAGCOGCIG CAGCOGCIGG GITGGCGGAA GAGCIGGACG CCGAGCIAGA GGACGAGGCA GAGCIGGACA
CAGIGGCGGC GIGAATIGGC CACINCITIC GGAGCCCGAN CICICCCGCA CIGGAGAGGA CITCITCITG GCTGGGCGGC
TCITGGITCC GCTCCCGCIC TGCTGCTGCI GGCGGCATIT NGCGCGGCGG TTCTTGAACC AGACCTGCAG TGGGCCGGAT
GGGGGAGAGT GGGTCAAAGG GAGCTAGGGG AGCTINITGC TCCACCGNCC CGTGGACCCA ACTCCCGGIC CAGAATATCG
CAATCCTTTC TCACCGAGGC CITCGACCCI TCCTGT

SEO ID NO:347: (Length of Sequence = 155 Nucleotides)

SEQ ID NO:348: (Length of Sequence = 362 Nucleotides)

AATTOCGATT TAACTGATTG TCTCATTCTG CTCATACATT TCAAGTTTAA ATGCAAGCAT AAAATGTTTA TCAACAAATC
TAGAGAGCAC TTGGATTTIN AATTTTCCTG TGATCACAGT AAGGAGCATA AAAAAGAGTA TCTNCTGTTA CACAAGGCCT
GTNCICTCTT TACATCTTCA GACTTAAATT CTGTAGAAGG TAACAGCTTT GTATTAAGGA CAGAAGCTTA GTGGTCACAA
ACAAAAAATA ACACTGAAAT ACAATTCGGG NATTANTGAT ACTGTGTGTC TCAAAGGATA CCTGAACTAT TACANTNACT
AATAATTTGG GCAATGAGAT TCCCNGGTGN TTCAACTTTT TG

SEO ID NO:349: (Length of Sequence = 342 Nucleotides)

AAATCCTITT TITTITTITT TITTITTITT TITTITTITT TITCAAGIAT CACAATGIIT ATIGATAGAT ACAAGIATAT
AAAATCAGGG CATGANCATG ACTTGATAAA TITAAGIAGAC TITAATTICAA TACTATAATA GENGGGACCA ATICAAATTC
TCACCATTIG TITCACACCC ACAAAAACCA CITCAAGGGC ATIAACCNIC TCTCAAAACT GNICAGITTT GIGCAAGIAA
ACCATGITTC TITTAAAAAG ACTTGIGCAC TIGCCCAGGC TCAAGGITAT TAAAATCTAG GCACATAAAG NCCATTACTA
GAGGTAGGAA ATACAGGCAA TI

SEQ ID NO:350: (Length of Sequence = 384 Nucleotides)

GATCIGIGCT AGCIGIAGG CAGCICIGGA ACGIGAAGAG CIGITIGGIT TGANCCGIGA ACAAAACIGI GITITGAGIT
TAGCIGACAT TAAAGAAAAA AGITCATCAC GIGACIGITA ATGIAAACCT GGITATIAAA ATAACIATIT AAAACAGGAG
AAATCIGGIA AGITGITAGG NITCIAAATT CCITITAGIC TGITCACTGA GATATTAAAT TTCAGTAGAC AGAACCCAAA
AAGAGATTIC ATTTCTTTCT AATCACITIG GCITCINICT NITTINITAA GTAGGTAAAA ACCTTCCTIG GTGGGCACCT
AAGCAGGATG CAGCCAATTA GTTCATGAAC CCAGCTGCGG ACGIGAAGGC TTAAAAATCTA AGGA

SEO ID NO:351: (Length of Sequence = 305 Nucleotides)

ATCCTGACCC TCCCCACTGC AAGCCCAGGG AGCCCCAGCC CAAGATGGCC AGCCTGAAAC TGTTGGCCAG GGCTCCTCTT GTGGCCAGT ACCCAGGGCT GGCTGCCCG CCATTTGCCT CTCCCCGGAG ACAGCCGTTC TTCTGGCAACC ACACCCCGTG CCTAGCCACA ACCCCAGGCT GCAGCTGCTC AGAAGCTCCA GGCATTTTGT TTCTGGTGAC CGCCCCTAAT GGGATATCGG TGATCACTGG TCCACCCTTC CTGTCAGGGC TTTTCTGGGG GCTGCTCTTG GAAATGAAGT CTTAA

SEQ ID NO:352: (Length of Sequence = 270 Nucleotides)

GAÀATTACCC ATGGICATAT CIAGCCIACA AAGAAGAGAA AATACAGIGA TICAAGITIC ATIGIATICC TCICATIGAT ATATITATCA ACCTICCAAT TGAAGGAAGI GICITCTAGG CCITTACAAA GAATGIAACC AGGGITTAGG TATACAAGIT GCATATGATA AATCTGICAT GTITCIATAT AAATCTGICC ATATICCICT TCTGAAATGC ATTATITTITG GGGGAAATTA AAATGIGATG CAAAGATCCT TATACTITGT

SEO ID NO:353: (Length of Sequence = 195 Nucleotides)

GTGTGATTCC ATTTATATGA AATGNCCAGA ACAGGGAAAA CCTATTINAG ACAACAGAGA CACAAAGTCG ATCAGCAGTT GCCAGGGGAG GAGGAAGACG GGAGGGAAA TNATTGCTTC ACGGGGTGAT GACAGAATGT NCCAGAACGT GACAGAGGTG GTGCCTACAC AACTTTNTGG NTGTACTAAA TGCCG

SEO ID NO:354: (Length of Sequence = 388 Nucleotides)

GCCAATTITT TTATTITIGT AGAGATGGAG TCTCCCCAATG TTGCCCAGGC TGGTCTTAAA CTCCTAGGCT CAAGGGATCC TCCCAGCTGG GCCTCCCAAA GTGCTGGGAT GATAGGCATG AACCACCATT CCCAGCCCAT TTCCTTTTTC CCTTTGCACA GTACCAGATA TATGGTTGGT ACTGCAGAAA TAATTTCCCC CTGCCCTCTA CATTGATCAT TTGATGACCA AATAGTGTCC GTCTAGCCAC TTATTTATGA TTTGTACAAA ACATTCCGCT TTCTGAGGTA GACAGTGATA TTCTGAAGGC ATCAGTAAGA GTAATTTTTC AGINTTGTTG AAAGTGCACA TTCTTTGTGT AAAGGTCAGC CTGTCAAGGA AATAGCAT

SEO ID NO:355: (Length of Sequence = 288 Nucleotides)

TAAAGTGAAG TATTGGGAAA GGGAACATCT CACTCTGATA GATTTGAATT INCTATTICT GCTCTGTGAC AAAACCCTGA
GTTGATATGT GATCAGACAT TTACAAGGCC CTGCATTCTA CCTGGAAATG GCTATAGTGG TGTTGAGATG
ATTTACTGCA ATTTGTCACT TTTTGAAACT GTTCCAAAAT AGTCTGCTGA CAGCCCTTCC CCTCATGAAA ACATCTCTCC
TTTTCCAGTT AAAAAAACAG TCAAAAAAACA CCAAAAAAAGG CCACCTCC

SEO ID NO:356: (Length of Sequence = 401 Nucleotides)

GGAAATTAGG TIGGITATTA ACATGIATAG ATGGAACIGG GGIGAAAAAA AAAAGGAAAT GGGAATGGAG TIGGAAGGGIT
GGGIGGGAGA GACACITCAC AGIATICITT TIGITITGAC TITIGGAAATG TIACTATTIC ATAAACITAA AAAAATGCAA
AAAAAAAATA TCAAAACIAG GIAGGAAGGA GAACAAAATG AAATATAACC AGAAAGGAAT AANCCIAACA CATITIGAGT
GAATCACAAA GCCAAACCAA AAAAGAGCIA ATTIAAGICA CITITAAACT TIGIGITTAA CITACCIACAC TIAGICTAAA
AACGGIAAAA AAGGGIAAAG AAATAGIGGA ACTITAGITA GITIGGGICTT TICITTACAG CAGIATIGGG ATGGCAACCT
G

SEQ ID NO:357: (Length of Sequence = 275 Nucleotides)

CAGACAGTOG ATAATAAACA CCTCATTAGG AAACCGATCT CAGAATGANC TCTGGAGTAT GAAAAAGATC ATTTCTTTTT
GINCCIGTAA CCTAGCATTC CITCTAGGCT TCINCICCIT TAATTGAACC ACAGCTTAGC TCATGTATTC TTITATTAAC
ACCCTGCTCT CATGTCCATA AGATTCAGGA ATTTAGGAAA TNAGGCTGGT TTGAAGAGGG TAGAAAGCAA TAAAGGCAGN
AAAAAATAAG NCTAAAATCA GGGGAAGATG TATTT

SEO ID NO:358: (Length of Sequence = 314 Nucleotides)

GIGAAGGAAG TATGAAAACT GAGACTAATA TIATGAAGTC TTTTTTTAAT TCTTTATCTT ATTGCCCATT TTTAACCCCT
TGGIGITIGA AATGGAAAAT AAATATNCTC TTCGCGATAG ATAATATGTC AATAACCAAA AGGIGGCCTT AACCAATAAT
TGGCCCAACT TTAAATTATT ACCCTAAAGA TATATAAATT ANCTAATCTA AAATTAAATG CAATTTTGCT ATGACTTAAA
GIGTCANTAA TCCTGTATAA GNGATCCNNT TTATGCAGTC ACTTAGGCAT GAAGTTGGCA ATTCATCTAA ACTT

SEO ID NO:359: (Length of Sequence = 372 Nucleotides)

CAAGAGAGAC ATAGCAGGCA TTGAAACAAT GGAAATGCCC ACATAGCAGA AGGGAGTGAG GGGATCCAAA CTACAAGAGC
GACAAAATCA ACTGTGGATC CAGAGACGAA AAAATGTTCT GTAGTGCAAA GGTAATCTGG TGAGATGAAA AAAAAAGAAC
CATTTTTAGA AAAANGGAAT ATTAGAAATA TTGAAGTAAA TATCATAAGT CATTCTATTA CAAAGGCATT AACTCCTTCC
TATCAATAGA ATGTACCAGT TTAAAANTTT TTAGTAGGAA TATATCTTTT ATTTTATTAA CAGAAATCAN GGGACAAAGA
GGATTTGATC CATCCATACT TCCTACTCTT ATTGGGTTTG TCAAAATGTA GG

<u>SEQ ID NO:360:</u> (Length of Sequence = 395 Nucleotides)

GCATTCTTTT GATACCCACC TAATAAAGAC AATCTCTAAA ACCAAATAAT AGGCTATGAA ATGTATTGIG AGINCTTATT
TCATTCAAGA CAGAGCTTAC CTTTAAGTCT CCAGCTGAGA CAGTTGGTTT TATCTTTCTG AAAGCAGTTT GGTCAAGTGT
TTCAAGTAAA TCAAAAGATC GGTTAATCAA TTCCTTAGCG AATTGGATTA GACACTCTCA TTTCAAATGG CAGTTTTATG
CTTACTCATT GTCTTGAATA ANCTTAAATA CTTTATGCTA TCTTCCTGCT CCATTATTTA TGTAATCACT GGGNCCTTAG
TATTCTGCTT TAGNNCATAT AAAATCACTT NCAGGTATTT TCCATCACGG ACACAGAGCC AGGCACAAAT TAACC

SEO ID NO:361: (Length of Sequence = 298 Nucleotides)

ATTITITIGI GOGGAGAACA TITAAGACCA TITCAATGIC ATGATGAAG CIAATGGGAG AAGGCTITIN INCIACAAAA
ATTINCITIA TITIINCAAC TITATIGAGG TIATAATIGA TATTAAAAAA CIGIACAGAT TIAATGIGIA CAGICIAATG
AGITGGGACA TATGCTTACA COONIGATGC TGITACCACA GGCAAGGTAA TACACATATC CGICACCTGC AAGAGTTTCT
GTGITTCCCN NIGITTCTCA TITIGNITT TTCAAAAATT TACTTTATAG GGTTATAG

SEQ ID NO:362: (Length of Sequence = 437 Nucleotides)

ATGCTGGAAG TGATTTCTGC AGCTCAGGAT TTTTTTTTTA AGCTACATTG AAAATATAGG TTTATTTTTT GINCAGGTTT
TNCTTTTATA TTTTTTNCT GCACAAAGGA GGAGGATTT CCACTTACTC ATATCGAGGC CAGATTTTTA AAGCCAGCTA
AGGCAGCATC AGCTGTGCGG GATTTAAAGC CTATAGCTCA GCTGAAAAAA AAGGTGGGGT GGCGTTTCAT GTAATGGGAC
ACGATGCCCT TCTTGCTGAA CGACTGGAAA GAGCACAAGG AGCACTTTTC CTTCTCCACT GCCCGCCGGA GTTCCTCGCT
CAGCTGAGGG GAGTCGTCCT TGGGCGGGA TGGGATGATC ACTTTGTTGG GCTTNTCGCT GATGGTCCTG GAGGCTGCCA
AGAAGTTGAG GTGTAATACG CATCAATGTC CGTGGCG

## SEO ID NO:363: (Length of Sequence = 449 Nucleotides)

TGATTTGAAG TAAGCTTCC ATGCTTCACT TAGGGTGGGA AATTTTAAAT ATCAGAGCTT TCTTTGTTAG CAGCATATAG
TTATGCAATT TATTTAAATC TGCAGTGCCA ATCTTTTTT GATGGGTGT CTTAGACCAC ACATTTAAGA TAATTATTAA
TATGTTAGAA CCGAATATAT TTTNATGATT AGTTTTTATG TGTCAATTTG ACTGAATTAA GAGATGCCCA GACAGGTGGT
TAAAACATTA TINCTGGGTA TGTTTGTGAG GATGTTCCA GAAAAGGCTA GCATTTGANT CAGCAGACTG AGTAAAGAAG
ATAAAGATAA TACTTGTCAT GTGTACAGGC ATCATCCAAT CTGCTCAGGA CCCCAATAGA ACAAAAAGGT GGAGGGAGAG
TGAATTATGT CTACCCCCTT GAGCTTGGGA CAGCCATCTT TTCATGCCC

#### SEO ID NO:364: (Length of Sequence = 282 Nucleotides)

GACTIGITIAA ATACACTITA TITTCCATTI INCCCGCCIG GECGACATGI GAACAGGCAG TGIGCAAAAT GGIGGCGGGC
AGIIGIAGGGG GCGIGIGGAG AGCCCCGIGG GTGNCTGCCC CGGICCCCAG GCTTCGTAAC ACTGAAAAGI GGGCAGCTAG
GAAGCGGGGA CGGAGCAGGG GTCCCCACCC AGGAAGCGCC AGGNAGATIN CITGTAACGC TACTCTACTG GAGGCTCCGG
GAGCACCGAG NGGGCAGTC CCCAGGGTCA TGAGGCCCGG GG

#### SEO ID NO:365: (Length of Sequence = 349 Nucleotides)

TTCAAGCATT TCTCCTGCCT CAGCCTCCCA AGIAGCTGGG ATTTCAGCAC CTGCCACCAC GCCCAGCTGA TTTTTGTATT
TTNAGTCAAG ATGAGATTTT TGCCATGTTG GCCGGGCTGG TCTTGAACTC CTGACCTCAA ATGATCCGCC TGCCTCAGCC
TCCTAAAGTG CTGGGATTAT AGGCATGAGC CACCACANCT GGNCTTTTIN TTCTGTTTCT AACTGTTCCC TTTTATTTCC
CTATGGAGCA TCTACTGAGC CCCAGCCGAG AGTAGAAACA AACCTGCTGG CTGCTCTNAA GGCACTTATA GTCCCAGTTA
GGGGNNGACG GGTCACTTAA CCACTTAGT

## SEO ID NO:366: (Length of Sequence = 366 Nucleotides)

ATGCAAAGGA ACAATGGTGT TGGCAAAGTC TTCTTTGAAT ATCAGAGACT GAGTCAATAA AAAAAATAGT AGAAAGGTGG
CTTTTACTAT TGACAAAAGC CGGGTCAAA AAAAGTAGTT TAAGTCTTAA GACTGAATAT GCATTAAAGT ATGCAGGTAG
CAAAGATGTA ATAAATTTCC TTAAAAAAAAG AAATTAAAGT TTTATTTAGA ATCAATTTTA CCNGTCATTG TAATTGACCC
MTCTGAGNAT TACAATAAGC AAGAGGAAAT TAAGGTGTTT TGCAAGAGCT GTATTTATAT TACNGNTTTT TAAAAAACCAT
TTTCTGAATT ATCGTAATTA AAGCTCTCCC AACTCGTTTA AGTCAG

#### SEO ID NO:367: (Length of Sequence = 391 Nucleotides)

GCAAAAACAA ACAAACAAAC CTTTAAGTAC AGTAGTICCA AAACACACTG CTAAAGTTAT GAAATAATTG TGGATCATTT CAAGTAAAAA TTATTAAAGG AGCAATAATT AACCACAAGG GGGCATATAT ATATATNCNC CTTAGATTCC AGCAGAAAGA CTAGTTTTAA GTAGTAAACAT GCACGTTGAA GTATTCTACA TTTTCAGTCA CTTAAACTTT CCTCTCCAG ATGGCTACAA CTTTTTAATA TTCGAGGTNT ATTTTATATC TAAGTAAAAAG GATTCCAGAA TACTCCTGCC CTGCAAAACA GTAGTGTTTT

## AGAAGNCICT NGGAAGIGIT GCIGITTACC CITTAGCAAA GNCNIACAAG AGCIATTAGI TGIAATAATA C

SEO ID NO:368: (Length of Sequence = 370 Nucleotides)

ATTICCCITC TECACTOGGI TOTOCIGCIC COCATITACA TEGITIACIT CATTITCCIC TICATCCAIT GGATICACAT
GIGITCIAGG CCAATATICC AGENGIGCIT GGAGIAAAAG TOCTOCIAAA TICAATITIG GNICIGACCC ATCAGGGCIG
CIGAAACCAG CATCITITGC AGAAACCCAG GCAGCAAAAC AATCACTITC ATCCAAAAGIA ATAGITAACA TOCCIGITIT
TAAGICIACT GAGAACCAAT TIGGCACATA CACCATITITA AATCITINCT TAATITCATC TICAAAATCC ACTITIGCCCA
GATCITCAAC TITACATGGC TICAATACAT COCAATATCN CACATTATTA

SEQ ID NO:369: (Length of Sequence = 315 Nucleotides)

GACAGGIATT CITIAGAAGI TITITGITTA CITATGITTI NCICITITAC ATCICCITGI GAATITCIGI CCCATITIGA
AGICICICCI TGITCTOGAC CAAGATCCCC TIGATGITCI GIAGCCAAAG ACTGAGAAAA AGAGITATIC TGAATGATGI
AGAAGGITGAT AAGICIOGIA AGAAACTGIT GGACATACTC CAAGCAGCAC TGCATTGCAG TCITITGGGC TGICITCCTA
CITOGGGIIG CIGICCCCTG AGIGACTACG GAAGGGGTCT GGATGATGGT TTCTTCAGAT CCCACAGTGG ATGCT

SEO ID NO:370: (Length of Sequence = 442 Nucleotides)

AACACTITTA CACIGCIGGC CIAATTIGIA GATATCCICA AGAAGAITAT GAGICATICI CACIACOGGA ATCIGITCCT
CTATITINIT TACCAATGGG TGCACCATIG AATGITGGCC ATCAAATAGC AAATACCCTC TGCCTGTATT TCCTACININ
GTITTAACIG GAGCCTCAGC TGAAAAGGIT TATGGTGCTG CIATTCAGIT TTATGAACCA TACTCTGAGG AGAATCTCAC
AGAAAAGCAG AGACTTCTTT TGGGITTAAC ATCAGCAGAT GGGAAGICTG ATAGITCCAA AACAATTCAT ACTAACAAAT
GCATCTGTCT TCTTCTCAC TGGGCNITIT TTTGATGGCA TTCAGGAAGT TTCTGACTTT TNCTGTATCG TTAATTCCAT
CTCTGGGGCCT CATGTCCTTC CAATTGAGGA GGATAATTCC CA

SEO ID NO:371: (Length of Sequence = 441 Nucleotides)

GACAAAGTCA CTCAGGGTCT ATTTCACCAT ACCCCAAAGT AAAGGCCCAA ACTCCACCG GGCCAAGTNT TTCTGGNTCA
AAGTCACCAT GTCCCCAAGA GAAGTCTAAA GACTCACTAG TTCAAAGTTG CCCTGGNTCC CTCTCTCTC GTGCAGGAGT
AAAATCTAGC ACACCACCAG GCGAGAGCTA TTTTGGTGTC TCATCTCTGC AACTGAAAGG ACAATCTCAA ACTTCACCAG
ACCACAGATC TGATACTTCA AGTCCAGAAG TGAGACAGAG TCATTCAGAA TCACCATCTC TGCAGAGCAA ATCTCAAACA
TCACCTAAGG GAGGTCGGTC CAGGTCTTCA TCTCCAGTCA CTTAGCTTGG CATCCAGATC TCCANTAAGG NCAAGATAGA
GGTGAGTTCT CAGCGAGTCC TATGTTGAAA TCTTGGAATT T

SEO ID NO:372: (Length of Sequence = 362 Nucleotides)

GAGGIATIGI IGITACIGGG AGGITGAAGG GAACACAAAI TCAGITATAA GICCITTITG AATACIAAGA GGGGAATAAI TAGGGAAGCI AAGAGGGAA TAATTAGGAG AAGAAAAAA AACITCAAAC AAITTITCCI GIAACAIGAI TITACITGCA TITATAAAACI GATTITTITI TCTAAGCACI CCTTIGATAA IGAITAAGIG IGGGGITACA TITATINAGG GICGICIAAT ATTIAAGGIG ACITAAAAAC CTCACACACG TIAATCCCGA ACIGIGAAAA TITCCCATCI TATCATCCCI CIGITACIAT CAATTITCCI CACGGIACAG ATTCTTTAT AATTACITCA TI

SEO ID NO:373: (Length of Sequence = 306 Nucleotides)

ATTCITIGIG CGIGIGIGIG TGIGIGIGIG TGIGIGIGIG TGIGITTIGC TGIGGAGITG AGITTCITIG TAAATICIGG ATATIAGITT CITGITAGAT GAATAGITIG TGAATATGIT CTCCCATTCA ACAGGITGCC TCTTCATTCT GITGATTGIT TCCNITGATG TGCAAAAACT TTINACTITA ATATAGITCT ATTTGITTAA TICTGITTIT CITACCCATG CTTCTGAGAT

#### CTTAGCCATA AAATGITTGC CTAGAACAAT GCCCTGGAGT GTTTCCCCTG AGTTTTCTTC TGGTAG

## SEO ID NO:374: (Length of Sequence = 278 Nucleotides)

GGGTTTTGGT TGAGGTTTCT ACCICATIAT CCAAGATATT TNCTTTCCAG CCAGCAGAAA GAAAAAGGAG AAGAGCTGCC ACCCTTTGIA TCCAGGATGA TCTCTTNTTG AAATCCTTGA TTTAATTATA TCTGCATGAC CCTTTNCCCA ACTAAGGTTA TATCCACAGT TACCGGGGGT TAGCACTGGG ACATCCCTTA TTTTANGAAC ATGTCTCAGA AAGTTGCACA AAAAACTTCT ACTACATCCC ATTGGCCAAT ACTTCTTACA TGATGACA

#### SEQ ID NO:375: (Length of Sequence = 321 Nucleotides)

GGTGACAGIA TITITIGIGG TITCTGIAGC TCCAGCCCCT CAGAAGGGAC GCCTACAGIT GGCAGCIATG GCTGIACCCC
TCAGTCATTG CCCAAGITCC AGCATCCITC CCATGAACIG CTCAAGGAAA ATGGCITCAC ACAACACGIC TACCATAAGI
ATCGIAGGCG CTGCCTTAAT GGTAAGAAGI GTGGGGGGCA GGAGATGAGC CTCTGGGCCC GTTATTIAGA CCCAGAGIAT
AAGAGITGGG GGATACGGGG ATAGGIGACT CTTTTCTCTG ACTTCAGAGC AAAAAAAAAAA
G

## SEO ID NO:376: (Length of Sequence = 337 Nucleotides)

GGAAAATTA CAGCATGACT ACATATGITA GGAAAAAAAT ATCTAAAATC AATTAACTAA GCTTCCATCT TAGGAAACTA
AAAAAAGAAG AGCAAATTAA ATCCAAAGTA AGAAGAAGAA AATAAATAAT AAAAATTAGA GCAGAGAGAA ATGAAATTAT
GAACAGGAAA TCAATTTTAA AAATAAATGA AACCAAAAGC TGGTTCTTTG AATCAATTAA TAAAATTGAT AAGCCTCTAG
CCAGACTAAG AAAAAAGAGG TAGGGCACAA ATTACTAATA TCATAAGTCA AAGAGGGGAC ACCCCTACAG ATCCCATGGA
TATTAAAAGG ATAATAA

#### SEQ ID NO:377: (Length of Sequence = 455 Nucleotides)

GITACAATIG AGAAAACATA TITAATAAAT CATIGICAAT TITINATAAIG TITCAAGCCC ATTCTTIGIT GATAGCCTCC
ACATITATAT GGITAAGICA TIGITGCIGI GITTCTTACC TATGACATTA TITINATATC CCTICATITG TOGATCTTAA
GATGITGCAG AAGGITCATT CCTGIACCCC AATACAGATT CACTTCCTTT AGCIGCCTIT NCIAGCACCA ATATGCTTTA
AAAAAAAAATG CGCAAACAAC AAGCAGIGAC AGCGGCCAAT TCCTCGAATG TCCAGATTAA TAACTGTAGC ATGCTAAAGA
AAGGIGIGIG TAAATAGCTG GAGATGGTAT ATGGTCCAGA GTCCAGCATA AAATTATTTC CTTTCTGAGG CATTCCCTCC
ATTCCCCTAA CCCGGATACA TGCATTAGGA ATGTAGCAAA ACCCTTCGGG GAACC

#### SEQ ID NO:378: (Length of Sequence = 349 Nucleotides)

GATGGTCACG GGTGTTTATT ACTGGACATG CTCTATGCTT ACTTGCTTGA AAACGCTCCA TTAGAAAATN AACTCTGAAA
ACTATATGCC CAATGCTAAT AGTGGGTATT TATTGGTAAC ACTCTTTATC AGGTGCTATG ATTGTTGATG GCTTTATTTN
CTNCTTCATA TTTNCTATAA TTNCTACAAT GAACATGTAT GTATAATCAG ACAAAAAAGC CAAGAAATAT CCATAAGTTT
TNCTGGTCAT TCATTCATCC CATAAATACT TGCTGAGCAC CTGCTGTAAG CCAGGCTCCG AGCCGCTGC TGGGTGGAGT
GCCGCACCCC AGGGAACGGT CAGCCCTCG

## SEO ID NO:379: (Length of Sequence = 421 Nucleotides)

ATTITICANTO ATATTITACT TATAGGITTIG CIGIATATAC TGATTANACT TCTGAACCTA AAGATTCTCT ATAATTANAC TAGCACAAAAT ATAATCTGTC CCTTACCCAC ATTIGTAAGAA TGICTGGTGG GGGAAATCCA ATATTGACCT TCACATTCCAC CATGGAAAAAT CTTTGTCCCCC AGAGTGCAAT TAGGGTGATT AAAAATAAGC AGCTTTTGTG AGTCTCAAGT TTGTTCCCCACAACAACAGCAGC ATCAGCAACT GGAAATTTGT CAGACATGCA AATTATCCAG TCCCACCTGA GACTTCAGCC CAGATCTATG

1.

GATCAAAAAT TTTGGGGGTG ACCCIGGGCA ATATGGGCIT TAATAAGACC CTAGGATGGG TTCIGATGCA TGCTCCAAAT TTGAGGATCA TTGAINCINT G

SEO ID NO:380: (Length of Sequence = 311 Nucleotides)

ATTINAGAT GGAGICICAC TCIGICGCCC AGGCIGGAGI GCAGIGCCAT GATCICGGCT CACTGCAACC TCCACCTCCC
AGGITCAAGC AATCCITCIG CCICAGCITC CCCAGIAGCI GGGATIACAG GCACCIGGCT AATTITITITI TTITITITITIT
TTITGAGATG AAGICITGCT CAGICGCCAG GWIGGAGIGC AGIGGIGIGA TCCTGACTCA CIGCAGCCTC TGCCTTCCGT
GITCAAGCGA TCCTCCTGCC TCAGCCTCCT GAGIAGCTGG GACTACAGGC ATGCACTACC ACACTTAGCT A

#### SEQ ID NO:381: (Length of Sequence = 442 Nucleotides)

AATCIGIGAA CATATATITI NATITATCIT AAATACCIAA GAGIGAAATI NITGGITCAT ATGIGGGIAT ATATICAACI
TIGIAAGAAT CIACCAAAAT GATITICCAA GIATATGIAT AATGIIATGG TCATCAGANC TACATGATAG TIAGAGITGG
TIAACATACT CACTGCAATG GATTGACTIT CCTGIGATIC AGCIATCCCA CTCTTAGGCG TATACCCAAG AGAAACTCAT
AATGICCTIG TGIGCAGCIT GIATGCTAAT GATTITAGTA GIATTTTTITG TAATAGCCAN AAGGIGGAAA CANIGAAAAC
TITCACGGAA ATGATAATG AATTAACAAA ATATTATATA TCTATATATG ATCCATTAAT CAATGAAANG GANIGAAAGIG
GIATACAAGA AACACCACAG GITAACCNIT GAAAGIATAT TA

#### SEQ ID NO:382: (Length of Sequence = 337 Nucleotides)

AACAGACTIT GGAGCCANIC CCATGIGAGI TIGAGICICA GAGIGACICI GGGCAAGINA CITAGGCITI CIGAGACICA
CTITCCICCI TIATAAATCA GGAAGAATAA TCCATIGCIC ATGAGITGI TAATNAGACA TAAATGAGAT AGIGIATCIA
AAATGIGATI TGITAAGICI AATACGNAAT AGATGCCIAT TIGAGIGITI CINATACTCA GGATGGITCI TOGGATATAT
TINCCCATGG AACAAAAAGC AGACTACTCA TGACCACTCG GATTTTATGI TCAGCCACAT TAGGGCTCIT ATGGCCIGAC
CTGAAGACCT ACCATTI

#### SEQ ID NO:383: (Length of Sequence = 421 Nucleotides)

GIGAAACTGA AGAAGACCAC GACAAACGAT CGCTCAGCCC CTCGCTTTC TTAGGTTCAC AAGAAATGCG CCGGTGGGGA
ATGAACTNIT TCATTAATAA AACCTAATTT GICTTGATCC ATTCCACTCT ATAATAAAAC AAAAGATTIT NTAGGCAACT
CGGAATATAG CTCTTTTGAA AGTACTCGAC ACCTTTAGAT AAGAATTAAA ACCAACCTAT GTAACTGACA TAATCTTGAT
CTNTTAATTT GTAAATATTG ACANTTINCT TTCTGCACAT TTTAATCTTA GTTTCCCTTT TGATTTINCT GAAGGTGCCA
AATTCCATTT AACINCTTTA CAAGTCTTTG TAAAATTTTA AATGCATAAA GGGGGGTTGG GGGCAGGGGG ACCNCGGANG
TAGTTTAATT TTCGGAAAGG G

### SEO ID NO:384: (Length of Sequence = 420 Nucleotides)

T

GGACTCCGTT CCCAAGAATA AGITTTGCTT GGGCGGAAAG TATGIGGTTC ATCCGAAAAA AAAGAAATCA ATGATTTGTG
GCAGTTCTTC ATGIGCTTTT GGGCATTINC ATATCTTCCT TGGAGAAATA TCAATTAAGA TCCATTGCCG TATATACATA
TATTAAAATT ATGGGTCATG TATTATGGCT CATACCTGTA ATCCCAATGC TTTTTGGATGT TGAGGCGGGA GGNTCACCTG
AGGTTAGGAG TTCGAGACCA GCCTGACCAA CGTGGTGAAC CCTGTCTCTA CTAAAAATAC AAAAGTTAGC CAGGCATGGT
GGCATGCACC TGTAGTCCCA GCTACCCAGG AGGCTGAGAC AGGAGGAATT GCTTGAACCC ANGAGGCAGA GNTTTCCAGT
GAGCTNAGGA TTGTGCCACT

SEO ID NO:385: (Length of Sequence = 404 Mucleotides)

GIGACAAATG TIAAGAAATT GIGIGICAAG CAAAATACIT TAGAGGCCAA TGGGCCACAT GITTITAATA TCAAGAGATT ACACACAAAA TIINITITCI AGCTICTITT GAAAAATCAG AATTGGGAAG ATGTATICAT GAGTGACTGC TGCCCCCCTIT GGTIGGGACT CGITCCITCA GGTICATTAC ATGGTCATCA ATAACCATTT CCITGGGCCC TGCTITTGIC TTGTCTGGCCC TCCTAAGCATT TGAATTITTA GIATTATAAG AAAACTTAAT ACTTINCTAT CAGTCACCAC ATACATGTGT TTCTATCTGT ACTACGNCTT ATTAAAAGCN TTTTATCAAT AGCCNCCATT TTGGAGGGGG GGATTTCAAC TGGTGCCTNG ACTAGCAAGG AATT

## SEO ID NO:386: (Length of Sequence = 267 Nucleotides)

GICTIGIGGA CATITACGIG GIATCITIAG AGCAAACACA GAGIGGITGC ATAAGCIGCA GIGITTIAGI ATCGGIGGGA CIGIGGCATG GCGIAGAGGA GINACAGICG CAAACIGATG GCCCAGCICT GACCCICCAG GCAAGIGGAC TCCGAGGAGT ACCAGCAGAT CITCCCACAT GCGICGGGA GGGCICIGGG GAGAGICAGT GGGCAGGAGA GGGICAGCIG TGCAGGCICC AGGGCCCAGC CCCGIGCTIT CCCCTCT

## SEQ ID NO:387: (Length of Sequence = 384 Nucleotides)

ATTITAAATG ACATTITATT TAGGCCAGGG GACCAGGIAA CATTATTTT AGGAGGAGAG CAAAAGGIGT TATATTACTG CTTCTAATTA CCTAGAAGGA AAGCATTIGC TACACTGCCA TITATGATTGG CTGCAGCAGT TCAACCTGGC TCTCGGAATC TGCCATTAGC TTGACAGCAT ACAGAGCACC ATATCAGGGT TACTATGGGA AGACTCTATT GTGGCATCAG AAACACAAAA AACACTGGAT ACAGTTAGIT TCTGTTGACA GTTTCAGAAG AAAATCCCAC AGATTGGACA GGCTGCCTGC TGAAAGGGTT GTCACTACAC ACAGCATGCC CTGAACCCTG GGAATGAAGT TACCCCTATC TGTGGTGATC AGGA

## SEQ ID NO:388: (Length of Sequence = 345 Nucleotides)

CTAAGATCAA ATGCAGGCAA AAGTGGTGAA TTTTACCACC TGTTTGTAAG TCTGGGTTTA TAACTTTACC GTAAATCACC
TAGAACACAG GCTAGCCGAA TCGGGGTGTC TGGTATGGCA ATATCCCGAG AGCTAACCTG GGGCTGGGGC AATGTTCTGT
GGCTGCTGCA CTTGCCTCTA ACAGGCCAGT TTAAAACGTC CAGCTCTCAG GGCCACATTC TCCAGGACAC AGCAGGGAGC
TCACAGTAGC TCAAGACCCG GCCCAGCCTC CATCCCCAGC CTTGGAGCTG TCAGTGCTCC CAAAGGCTGA AAGAATTCGG
TCTTGGCTGA GTGGACAGCC CCCTT

## SEO ID NO:389: (Length of Sequence = 156 Nucleotides)

TAACCTGCCC CAGCAGTGCA TGCAGGAAGA CTTCCTGGTG CATGAGGTGA CCAATCTGCC GGTGACAGAA GNACTGATTG AGCGGAGAA TGCAGCCCAG CTCAAGAAGT GGCGGGAAAC GCGGGGGGTG CTGCAGTATC GGCCCTCACG GCGACT

## SEO ID NO:390: (Length of Sequence = 364 Nucleotides)

GAGTCTCGCT CTGTCACCCA GGCTGGAGTG CAATGGCATG ATCTCGGCTC ACTGCAACCT CCGCCTCCCG GGTTCAAGTG
ATTCTCCTGC CTCAGCCTCC CGAGTAGCTG AGATTACAGG CACGTGCCAC CACGCCTGGC TAATTTTGTA TTTTCAGTAG
AGATGAGGTT TTGCCATGTT GGCCAGGCTG GGCTCAAACT CTTGACCTCA GATGACCGC CTGCCTCAGC CTCCCAAAGT
TCTGGGATTA CAGGCATGAG CCACTGCACC CAGCCCAACA CTGGGATTCT TTTATCCGCT GGCTGGCTCT TCCGCAGTTG
AATTGTGTGA CTTCTTCCCC TATCTGAGGC CCAGTTTTTC TTCA

## SEO ID NO:391: (Length of Sequence = 325 Nucleotides)

GAGTGTCCAG ATGATGGCAG TGATGGCCCA TCTGGAGCGG CTGCTGTAAG GACACTGGCT GCAGCAGGGG AGGCACAGCC AGGCCTGCGC ACTAGGCAGA GCTGGTGTGG GAGCCAGGAG CAGATGAGAG CCCCGGCCTTC TACCAAGTTG GCAGTGCAGA AGGCCGCACT CCCGGGTGCT GATGCCGAGT TCAGCTCCAG ACCCTGGCAT CCCTGGGCTN TCAGGGGCCC AGGAAGCCCC CCACCCCTGC AGGNTTCAAA GGGCCTGCTT CCCACTCCTT GGCCTTTCCC TCCTCCTGGG AACCATTCTG GGGCAGAGCA

SEO ID NO:392: (Length of Sequence = 371 Nucleotides)

ACATCCACAC AAGTACAAGA ATACAGAAGC TICICIAGIC AGGATGCACT AAGCACCIAA TGAGTAAACA AACTICAGCA
TATCCTCATT GITCTCATGG TATTAATTIG AAGATACTTA CCTTGGAACT AAATCIGGIT TIAGAAGAGC TGCTIGITGT
TCAGCTCCAA CTGGITGGGA TACAGGCTGI AAACAGTACA GACATAAAAC TIGCTATGAT AACAGTAAAA TICAAGCTAA
ATATACAATT TGITACIATT CAGAAAACAC GATAGITTIG GITACCTTGC AAACCTGGIA GGAATATCIA TGITATTGAA
TGICTGIATC AATCCIATTA TTAACATTAT TACCAAAGGT AAATAAAATT T

SEO ID NO:393: (Length of Sequence = 404 Nucleotides)

CCITITAGIA GCITCICIGA GGIGAAACCA CITCITITIG ACCATCIAGC GCANICINIC TITACATCAA CCATITATITI CAAGIGIAGI GIGCITCAGA GICIGAAAGA GCIATIGCAG AATIGGCIGI TGIGGCITIC TAIGGACATI CACATGAAAC CIGITACAAA CAGICCICIA GAGACAACIT TGGGIGGATC CATGAACICT GIGICIAAAC TGATCCACIA TGIAGGGIGG CIATCCACIA CIGCAATGCG CITGGAGAGC AACAATACIT TCITGCIGCA CITTATITIG GATTICIAGA GAGAGGIGIG TGACATATAT ATAAATNATA ACCITCCATI AGIGGGIATT GITTCCICCT GGGGATCCIT CIATTCIGCA CICCTCAGCC TGGG

SEO ID NO:394: (Length of Sequence = 416 Nucleotides)

GCCACACACT GGAGAGGGAG AGCTAGAGAG TGAGACAGCA GGGGAGCTGA GGGTGAATGG CTGCTGTTAG AAGCCCTGGA GACAGCCTGA GGTCAGAGCC CAGCCCCACT CCTGGCTGTG TGATCTTGAG CAGGGCTGTT AACTTCACTA GGACTTGGTT TCGGTTTCTC ATAGAGAATA GGTACAGTGT GAATTAAATA TATATAGCTT GAATAAAGTG CCCAGCTTGT GGGTAGCTGC TGCCATCATC ATCACCATCA CCATCATCAC CATCACCATC ATCATCATCA TCATCATCAT CATCATCATC ATCATCATCA TCTCAGGCAC AGGGGCTTTA AGGACAACAT GCCCAGTTTA AGGANGAACA CAACTCTCTT CATTTATAGC GNCCCTCCAT CAGTGAGTAG ACCCTT

SEO ID NO:395: (Length of Sequence = 315 Nucleotides)

AGAGATCAAA TGTCTTAAAC ATTATGGAAT AGGAGTGTAT GACTGACTAA CATCCAGTAA TCATTAGGGA AAACAAACAT GAGTGAGGCAC AACTGAAATA ATTATGATAC AATTAAGGGT GGTAGGTTAC ATTTGTATAG TTCTTTAAAA TATGCATTAT TCCCACATGAT CAGAAATATA AAANGANCTA GACAGATACT GGTAGGGAGA CAATTAATTT AAATTTGTAA CATATTGCTT GCACAGCA TTCAAGTTGA GTGCTTAATG TGTATCGGTG ACTGCACTGT GCAAATAAAT TTGGGGTTAG TAAGA

SEO ID NO:396: (Length of Sequence = 409 Nucleotides)

CTCCAGTTCT CACGTTAGGG TGCTTTCTTC CCCGGCAGAG TTTTTCGAGC TCATGAAGGT GGACTGCCTG GAAAGTACTC
TAGAAAAGTC ACTCCAAGCA AAGTTTCCTT CAAATCTCAA GGTCTCCATT CTCTTAGACT TCACGCGGGG CTCACGAGGC
CGGAAGAACT CCCGCACAAT GCTGCTCCCA CTCCTGCGGA GGTTCCCAGA GCAGGTCCGA GTCTCCCTCT TTCACACGCC
GCACCTCCGT GGGCTGCTTC GGCTCCTCAT CCCTGAGGCG TTCAACGAGA CCATCGGCCT CCAGCACATT AAGGTGTACC
TCTTCGACAA CAGCGINATC TTGAGCGGTG CAAACCTGAG TGACTCCTAC TTTNACCAAC CGTCAGACCG NTACGTGTTC
CTGCAAAGGA

SEQ ID NO:397: (Length of Sequence = 414 Nucleotides)

2

ACAAGCTGTG TGACCATAGG CAAGTTTGAC CTTTCTGAGC TGCCATTTTC TCATGGTAAA AGAGAGATAC TAGAGGAACC
TGCCTCACAG GATTGTCATG GAGAATAGAG GAGATGATAC AAGTGAAGCA CTAGGCAGCA CCATACTTGG AACTAAGGGA
AAGCCCGCAG TCAATGTTCA GTATTGTTAC ACTTGCCAGA TTGTGAAAGA GCGCAGGCAA CCCTTGAGTT GAGCTCAACG
CTGGAGCCAA GATCAATGAC AGAAGGATTT TGTTTTGAAA CAGCAACTAA TGACCAGAGA GAGGAAATGG GTCATGAAGC
TCCATGGTGC CTTTCATGAA AATGAAATGT AAGGGCGTGA TTCAGGAAAA AGGGACCACG ATCAATACCA GCAGACTCTT
CCCTATGCAC TGGG

## SEQ ID NO:398: (Length of Sequence = 400 Nucleotides)

CATCAAGCTG GGAATGCCCT AAAGTGGGGG CGTGAGGAAG AGAAGGGGTG ATACCTAGAG GCTGGGGTAT CTCTGTCCCA
AGGAGACAAA CTATAACAAG ACCCAGCAAC TGAAGGGTTA ACACCTAGCA CAGACGTATA CCTCCAGGRT CCTAGCTGCA
TTTCTAATTC TGCTTCATCT ATGCTTGAGC ACTACTTGTT GTTAAATATA CTTAATATCA CTCTTAGCTA ATTTCCTCTA
TGTAGATTTT TATTTATTTC TGAGGGCAAC CCAACTTCCA GGCTCTTGGA AGGAAATAGA CTGCAGCCCC TAAGTGTGAT
CAATACTTAA TTATAACAAT AATCACTAAT AATAACTTGT GCTGCTTCAT TGTAACTAAA ATGTACACTT TTACATTTTT

## SEQ ID NO:399: (Length of Sequence = 324 Nucleotides)

AAATATTTAC AATTITACAC CTTCAGGAAG GCTCCAAAAT ATAAACACTG TACCTCTCCC TAGAGAAAAA AAAATTATTC
TTCTCTTCAA AAACAGGAAT ACATTCATTT TTTCTCACTG TGTGAATCAA GTAATTATAC AAATAAACAT CTGAAACATT
TTCCTTTTTA ATATATTAT ATAATATATA TTTNITAACAG CTTTACAAAT AAAGGCAACG GTCCTTTTCT AATTITCATG
CCTCTCAACA GAAGGGTACA TGATGCTCCC TGAATTCCAG GGNIATTTTT TNCTCTCTAT GGTACTTTGT ATTTCACTTT
ACTT

## SEO ID NO:400: (Length of Sequence = 388 Nucleotides)

ATTAAATCIG AGITTIGITT GAGCATCITI CAACATGIAC CATATITATG ACAATTCICT TCCATAGGAT CIATCIGINC TGCAACAAGI ATTGATCITA CAGIAAAATT TITCACAAAT TCATIAGATT CTATGICICT TTTTCIGGIA GGAATITITG TGCAGGIAGC TATCICTIGC CCTAGATTAT TCCCCTTGIT TAGCTGCTGA TTCTTAAACT GGCCTCTAGA TTTCCAGATT TCTTCCGGIA CAGACTTTCT CTTTGCAAGT NCTTCCATCT CTAATCITTG AGATTAATCT TCTTTTGAAA TGTCCTGCTG CTCTACTCTT GTATGICTTG GNCCCACGTT CAAGCTTCCC ATCTAGCAAA ACCAGGGTT CTAATATT

### SEO ID NO:401: (Length of Sequence = 339 Mucleotides)

GTTTATTGCT CAAAAACAAG AATTCAGAAG CAAAGGTGGA GAGACTGTGG GTTGGGGAGA TGGCAGGAAG GGGGCAAGGC CTTGTCCCAG CTCTCCCCTT TGTCCTTCTT CTGACCCTCC TGGCCGGAGT CAGGCCTAGG GCCAGGGCAT CTGGGAGGGG GGCACCTTCG TGGCCAAGGG AACAGTAGAG CTATCGGGGG CAGTCCTTGA GGGGTGCCCT GGGCAGGAGG GGCTGCAAGA TTTNCAGGGA GGCAGAGTTC CCCTCCCAGA ATCCAAAAGC CGGTAGGGGG GGGGCAAGG CCCCTCGTTT GGCAACTNAG AAGAGGCGGC TTTTGGGCG

### SEO ID NO:402: (Length of Sequence = 400 Nucleotides)

TGTCCAGTGT ATGAGGACGT CCCAGCGAGA AATGAAAGGT TCTATGTTTA TGAAAATAAA AAGGAAGCAT TGCAAGCTGT CAAGATGATC AAAGGATCCC GATTTAAAGC TTTTTCTACC AGAGAAGACG CTGAGAAATT TGCTAGAGGA ATTTGTGATT ATTTCCCTTC TCCAAGCAAA ACGTCCTTAC CACTGTCTCC TATGAAAACA GCTCCACTCT TTAGCAATGA CACGTTGAAA GATGGTTTGT GCTTGTCGGA ATCAGAAACA GTCAACAAAG AGCGAGGCGAA CAGTTACAAA AATCCCCGCA CGCAGGACCT CACCGCCAAG CTTTCCGGAAA AGCTGTAGAAA AGCTGTAGAAA AGCTGTAGAAA AGCTGTAGAAA AGCTGTAGAAA AGCTGTAGAAA CACGTTGAAA CACGGCCCAAG CTTTCCGGAAA AGCTGTAGAAA AGCTGTAGAAA AGCTGTAGAAA AGCTGTAGAAACCCCCC CTTTCCGGAAAA AGCTGTAGAAA AGCTGTAGAAAACGAACGCACCC CTTTCCGGAAAA AGCTGTAGAAAACA GAAACCCCCC

SEQ ID NO:403: (Length of Sequence = 416 Nucleotides)

AGTIGACIGO TOTGATATGG AGAGACCIGT TAGTOTTGTA TATAGTICCOC AGCOGGAAAA AGCATOTOT GAAGGITAGG
GCATITIGIG AGGAGAGCIC TAGGGCTATA TOAGTOTGGA GGTATGATCT CIGATAAAGA TOATAATICT CATOTCAGTA
ATCTICITTA GAACAAAACA TICITCATIG TAAGCTICIC ATTAACTGAA GGCCACCIGA TOTGAGATTT TGGCTCTTAG
AATACTCTTT NOTGIGTOTC AATCCICATA TGGCTTACCT CIGAAATATA GAATATATTT COTTGIGTAG COTGGTAGAG
TTGGGTTTTG TTTTGTTTTT CAAACAGTAA CITTTATTTG ATTGTAAAAC TTCCAGATTT CTGAGATGCC GCCTTACCAG
TCTTAAGGTT GATTIT

SEQ ID NO:404: (Length of Sequence = 368 Nucleotides)

CCTCINACTC ATTGTGATGA GTAGGGCGGA GGGCTTCACT GCCTCANTTT CCCCAACTTT GGACCITAAA TCCTCTCCTG
ATGCCTCTCA GCCCAGCCAG GAAGGAGAGC TAAGACCAAG AGGGATTTAA CAGATGCAGG ACACACAGCC TTGTCCTCAG
ACCCCCCAAG TCTGAGAGAA GCAAAACACT CACCTTGAGA GCCCTCGGAC TTGGAGGTGA GGTGCAGAAC CCAGGCTGGG
TGTGTGCTGA GGGTGGTGG GGGTGGGTGG TGCTGGGTGG CTGGCCTGGG AATACTTTTC TTAAGCTAAG GCTGGGGCTT
AGGGGAGGGC CAGAGGAAGG GTAAATAGTT TGCCTGGGGG GGTGCTGG

SEO ID NO:405: (Length of Sequence = 395 Nucleotides)

GACAGGICCT CACTCTTACC ACAAAGCTCA AGTCAGCTTG GCCTCTCAAG TGGAGAGATA ATCGTTCTAT AGCAAGAAGT

ACAAAGATTC TCTGCAGACA AAACCAGCTA GCCAAGGTTC CACAACATGT GTACACGTAT AAGTCTGNTG GATCAGAAGA

AATATGTACC CGGGAATCAG ATGTAGCCAG CCCACATACT AACAAACATC AAAGCAAGCC TAGTCAGATT GAGTCCCATT

TGAACAATCT TTATAAAGGT TTCTTCATGT TATTTACAAT TCAAAGTAAA TTTACTTTAT AAGCAGCTAG GGGAATTCTT

TATTTAGTAA TGTCCTAACA TAAAAGTTC ACATAACTGG CTTCTGTCCA AACCATGGAT ACTTGAGCTT TGTGG

SEQ ID NO:406: (Length of Sequence = 358 Nucleotides)

GATACCTIAA TCTAAATTT ATCTTAATTT TTATTTTAT TTCATTGTCT AAATTTTAT CTAAAATTTT TNCTAGCTCT
TTATTACACC AAGACAGCTT CACATTTTTA TTTATATATT GTACATCTCA TGTAAAGCNAT TACCGTATAT AAGCTAGTGT
CATAACTTAA GTAGCCACAT TCATTCAGTA TGTTTTATGT TTTCTCTCTG ACTGGATCTC TGATACATTC TTTCCTGTTC
TAGCTGCTTT TATGCAAAAG GGCATTATAT GTTTGTCAAT CAACCAGGCT TCTGTGACTG TTTAGAAGGA ATTATGTAAA
TATATAATCC NGTGGCCTGT TTCACTTTGG CCATGTTT

SEQ ID NO:407: (Length of Sequence = 294 Nucleotides)

CTGTGTATAT TTAGTATCTT TNATTAAGAA GACTGGTTGA TATTTGCCTT CAGCTAATTT ATAGAAAGGA TGATCATCAA
TGTCTCTAGT TTTCTTCTAA GTGGCTTGTC TGTGCAGGTA CATATAAAAA TNCAACTATA CAAATAGCTG GACAGTTGAG
TCTCAACTAT GAAAATCTTT TCTGGGATCA AGATCTAAGA AGTTGGTGTG TGTATGAGTG CAACCCATCA TTCTATCCCC
TAAAAAATCTG GGGTTTCTCA GCCCAAACAT TCNCACTAGT AAAGTCAAGT TTCA

SEQ ID NO:408: (Length of Sequence = 367 Nucleotides)

GGCAAGGAAA GAGAGCTTTA AATTGAAAGG TTAATTTCCT AAGAGGAACC TGGGCTGAAT GACTGCAGTG TTATACCCTC
CAATCTTTGC AGGTGGGCAT GGAACACTGC TTGTATCACT CTGTGCACGG TATAAATCCA TATATCCACA AAAACACACA
TCCATCCATC AACATATACA TGGTTTGGGA TGAGCAGGTC AATAGTTTTG AGAGGGAGTT TGTNCCTTTT TTTTTCTCAT
TATACTCTTA AATTGTTGTC AGTTATCAAA CAAACAAACA GANAAATTGT TTGGAAAAAC CTTGCATACG CCTTTTCCTA
TCAAGTGCTT TAAAATATAG NCTAAATACA CACAGGCTTG AGGCAGA

176

SEO ID NO:409: (Length of Sequence = 233 Nucleotides)

AAGAGACAGG GNCTCATTCT GTCAACCTGG CTGGACTGCA ATGGTGTGAT CACAACTCAC TGCAGCCTTG AACTCCTGGA CTCAAGCANT CCTNCCACCC CAGCCTCCTG AGCAGTTAGG ACTACAGATG GGTGCCACCA TGCCCAGCTA ATTTCTAAAT TTTTTTTAGA GACAGGGTCT TGCTATATTA CCCAGGCTGG TCTCAAACTC CCTGGGCTCA AGTGATCCTC CTT

SEO ID NO:410: (Length of Sequence = 295 Nucleotides)

GACAGGGGT GGGGAATTCT ACTCCATGGT ATCTTCAGAG CTAGGATAAT GCTCCTTATG CAATCCCACT GCATATGACC
ATGGCAGTAG AACAAGTTCA ATTACTACAC TGGATGCGTT AAGTGTGCTT TCCTAGCAGA AAGCACCAGG GTGGAGTCAA
CAGTTCACAT GCTAATACTT GGAAGTATTT CTAGAAGGGG GTGCTCAATA GAGGGCAGAC ATGATGCAAG NNCTTCATAC
TAGAAAGGTG TCCTGTGTGT GCATGCACAG CTGGATGGGG GCACACAGGA GCAAG

SEQ ID NO:411: (Length of Sequence = 304 Nucleotides)

AATAAAAAGA CCATTAACTI AAAGIGGIGI TAAATGCTITI GIAAAGCIGA GATCTAAATG GGGACAAGGC AGGIGGAGGG GAGGCCAGIG TACATGTAAA TGCCCACAGC CCAGCATTGG GITTCCCTCC CAAGGNCCCA GCACCAACCT CTGAGCCCAA GACCITGCCT GAAAACAAGC AGATACCGAT TGNITCATCC TATTIATGGA CATGIAGGIC TAGITGCATT TTCACINGGG GGAGGGGGGA AGGIGAATTA TGGTAACTIT TAATGATCTA TTCAGGCAGT AGAGCTCTTA AGGG

SEQ ID NO:412: (Length of Sequence = 250 Nucleotides)

CAGGIGOGCA CTATCACGCC CGGATAATIT TITTIGITIT TAGTAGAGAC GGGGITICAA CATGCIGCIC AGGCIGGTCT CAACTACCGA CCTCGIGATC CGTCCACCGC GGCCTCCCAA AGTGCTGGGA TCACAGGCGI GAGCACCNCT CCTGGNCACA GGINGAGACC CTTTCTATAT AAGAAAGAGA AAAATGTCTC TNANTCACAA GAGAATGCTA ACAACGGGGG AAAGCACAGA CACAAAACCTG

SEO ID NO:413: (Length of Sequence = 337 Nucleotides)

GTACTGGGAC AAGGGAAGGC AATCACAAAC AACTGCCCTC AGGAAGAACT CAGTCCCTGA CTGTAGTGTC TCTTCGGGGG
AACCAATGCC ACCCCCCTC ATCCCCCAGA CGGGCGAGGG GCTGCACCCT TAAAGCAGGC CATTGGGCCT TCCGGGCTCC
AGGGCCAGCC CACCCCGNTC CCGCTGGTGG ATCTTCTGGT GCTGCAGGAG GTGCTGCTTC TGGACAAAGC TCTTNTCACA
CTCAGTGCAG CTGTAGGGCC GNTCACCCGT NTGGATGCGC TGGTNCCGNA CCAAGTCAGA TGGGTGACTG AAGCTCTTGC
CACAAGTAAC CACAGAT

SEO ID NO:414: (Length of Sequence = 304 Nucleotides)

GETTTAAGAA CIGCGITTIG GNGCCCAATC TITIGGIGAAA AATATTITIG GGICATCTIT GAAAAAAAATC CITITCAAGG CAGACAGCAT TITAATGCIT TGICTGITTI TCCCIGITTIG TCAGCICIGN CACCAGCCIG AAAGATTTAA AAAINCAAAT TAATGGAGGN TITATTIGICC TNIACTCAGG TCACATTICT GGGITTTAAT GAAGNGACAG ATGCTGCTCA TATACAGGAT TTAGCTGCAG TITCTTTGGA ACTTCCAGAT ATTCTGAATT CACTCCACTT CTGCAGTCTA AATG

SEQ ID NO:415: (Length of Sequence = 315 Nucleotides)

CETTETEGAG TEGETETCTT TEGATAGAAG GASTGAGGAA CTEGGGGAGG AAGGCCTGGG GGATCCCCTG GCGGGGCTAC
TTCCTGGGCC CGGNATGGAC ACCTGGNAGC TGCTGCGNIT GTTGGGGTCC TGGCAGGGGT GTGGTGTGGC CCTCACCACT
CTGNTCACCT GCTCCTTCCT NACAGTGCCT GGAGAAGTTC CCTGTNATCC AGCACTTTCA AAGTTCGGNA GCCTNCTGCC
CATCCATCCT GTCACGTCGG GCTAGGAGGG GNCAAGCCGA AGAGCCACCC ANGNCACANT TCCTGTGCCT GCCTT

SEO ID NO:416: (Length of Sequence = 343 Nucleotides)

GIATTICAAG TGITTIATTI GCTTTCTGTG GTGTCAAATT TGGGGTCTCC TAGAGCCCAG CCCCAGGCAG AATCCGGCAT ATCCTTCTCC GCCTGGGGG CCCGGGACAC AGGAGTTTCA GAAAAGGCAC TGGCAAAAGT NCTAGGGCGG GGGTCAGGGA GAAGCCACAC TGAGCCTGGA GGGACCGGGC CCTCCTTCGG CGGCAGAAAA CACAGTCACC TTINGCAGGG AAGGGTTTTT NCCTAGAAAG AAATTTAAGA CAAGATAAAA ACCTGAGATG TTAGAGGAGC CCCCAGAACC AAGCCGGTGC TNCCCTGGGC AANCAGAGAG TGAACTCGGC TTT

SEQ ID NO:417: (Length of Sequence = 202 Nucleotides)

TATTTCTCTG TGAAAAGGGG GAAAATAAAA GGAATAAAAT AAAAACGGCA CAGTTGACAC ACAAAAAAAA ACCAATGATG GGGAGGACGG GAGGTGGAGA AGTAAATGGG GGAGGGGWTC CCATTACAGC AGCAGGATCC AGTNACCCGG GATGCTCACA TCINTCCCTN ACGTGGGCGG TGTAGCCCCCT TCCTCCCCAAG GT

SEO ID NO:418: (Length of Sequence = 299 Nucleotides)

CACCAGITEG CIGCAGAGCT GICITCAGGA TCATAGGCCA CIGCCAGAGT CITGGAGAGA GGGAGAGATG GAGAGGAAGG
GAGTIGAGCIT CGGIGGICTIG ATTICTGGCT CAACGACGCA GGAACCTCAG GITCAAAAGC AGCTGACAAG AGCCCAGAGA
CCGGICTTCIT GGCGICCGGC AGAGCCCTTCI GGIGGCCCGA CACCCAGGCA NGGAGGGAAG GCCCTGAAAT CCCGITTTIN
TGGCAAGATT NGITTCCAAG AGGAGATAAT GGCTCAATTT TGICTTCCCCA AGTTGATCA

SEO ID NO:419: (Length of Sequence = 223 Nucleotides)

ATTGITGGGA AGGIAACATT TTTCCATGGI TTTNATTTIN CCCAAAAGIA TTTATGIATT GATTTATTIG GNICTGACTC
AGGCGACGIA CIGIAAGACG ATATTACTIT AATCATCTIC ACATCAGIAT TTATGGAATA GCCACAGGIG CCICATCCIT
TAGIAGGAGI TAATTATACA TTINCTGGCC GAGIAAACAT NICCGAATGG TATGIATGIA TIT

SEO ID NO:420: (Length of Sequence = 406 Nucleotides)

TITIAAATATI AAGITAAGIA TATAACTICC CCTATGCCAT ATTGCTTTAA TCAGGGGACT GAGCATCACA TITIAGATTIG
ATGAGTTTGG GAAAAGITCT CAAACATCCA GACCCATGGA CCTTAAGAAT TACTGCAGAA ATCTCCTTCA ATATAGTCAT
AGGGAGCATT AATGCTTTTG TGGTACTAAA CATATTTTTG AGCTTAGATA CAAATCCTTC TTGTCCTGAA CTGATAGGGT
AGGAATTGTT TAGGTGCTTC AAATCCAGAT CTTTCAGGGG TTGCCACCTA AACTCATCTT TATGAGTAAC TCTAGATAAT
AATACACTTT GGTATCTTCC AAAGTGCTTA TCTAGGCATG GAAAAGTTCA GTAATTATCA TGAGGNCCTG TTTTTAGGTT
AGGTCC

SEO ID NO:421: (Length of Sequence = 281 Nucleotides)

ATCCAGATTA CAGACTAGIA CACAATAGAC CATATATINCT GICCAAAATA CACCTACATT ACACTAGIG GAACANGAAC CTGGGCTTTG CAAAAAAGAA TITATGATTA AAATGTAACC CCCCCCAAAA AAAAATGAAG CTTAGAATTA AAAGTAGCCT TITACCCAGA TITATCACCA GNITGTAAAA TICTAATATG GGTCATTAAC TGTTCACAAA TAATTCATAT TITGGNCTTAT GGTTTAAGGG CTCCAGATTG AAAAGGTGCT CTGAACTTCT G

SEO ID NO:422: (Length of Sequence = 220 Nucleotides)

TTTGTATTIT TAATAGAGAC GGGGTTTTGC CATGTTGGCC AGGCTGGTTT TGAACTCCTG ACTTCAGGTG ATCTGCCTGC CTCGGTCTCC CAAAGTGCTG GGATTACAGG CTTTAGCACT GINACTGTCT GCCTGGCTGG CTGGCTGGCT GGCTTTCTTT CTTTCTNTTT TCTNTCTCTC TCTCTCTCTC TCTTCCTTTC TTTCTTCCTT CCTTCCTTCC 178

SEQ ID NO:423: (Length of Sequence = 391 Nucleotides)

CTGTCTCTTA TCTGGGCAG CTTTAGACAT ACTAGCTTGG TTGGAAACTG ATATTAAAAG CCTAAAACAT GTAACTTTNC
TTATCAGGIT ACTATCATGG GGAACTAAAG ATTCCTGGTT TTTTGTATGT NCCATAACTA TACTTTAGTA AGCCCTGATA
TACGGTGTTA ATTTTCCTNC AGTGAAGGAA ACATGAAGAT ATATTTATGT GCACACATAC ATATATATGT ATATATAACG
TATATTCAAA CATGCACTCA GAGGAAGTTA GGGAGAGAAG TTTCTAGCTA AACATGATCT TGTGAAATTC TTCCATATGT
GGAAAAGTCG TCAGTTCATC TGACATAGAG CAATACCATA CATATATACA CACAGGGTGC TATGGTATAC A

SEO ID NO:424: (Length of Sequence = 379 Nucleotides)

TGGGGAGCCT GAGGCATGAG AATCGCTTGA GCCCTGGRGG TGGAGGTTGC AGTGAGCTGA GACCCCGTCA CTGAACTCCA
GCCTGGGTGA CAGAGCAAGA CTCTGTATCA AAAAAACAAA CAAACANACA AACAAAAAAG CCTATTATAA AACAATAGGA
AATGCTGAAG TCTAGTGCAC CAAGACATAC TGAATTTCAA ACTAAATAAA TTAAAATTAT CATGTACATT CCACTACATG
TCAAAACAGG AAAANCCATA GTATTATAGT TGATATGAAA TGANGATTAC ATACANCAGT AATACAGAGN AAACATGAAG
CTGCTTTATAT TTATTTGGGN ATAAGGNCAN CAGGGGCCAA TGATTTTCAC TGCAGATGT

SEQ ID NO:425: (Length of Sequence = 448 Nucleotides)

TOCACAGGGC GGCCTGGGGT CTGGAGATGG GCGCTGGGCC CACGGGACGC AGATGGGGCC ACGCTCTGCC CGTGGCTGGC CCACGTTCCT GGTCTGCAGT GCTGCCTCCT CCCCAGCACC CCTGGGGCAC AGAGGGCAGG GTCACAGCTG GGAAGAGGTG GGGGGTAGAA ACCAAGGCTG GCAGAAGTNT AGCCGGGCTC CCTGATAAAT GCTGGAGGAC CCCAGGGCAC CTGCACTTAC TGTACCCTCT CTGAGAGCAT TTGTATGATC TCATGTCTCA GCTCTNNGAG GCTGGAGGTC CCAGAAAACC AAGGTATGGG TAAGATTCAG TCTCTGGGTG AGTACCCAGT TNCTGGCTTC TAGATGGCGC CTTTTTCCCT GTGTGTCCTC AAATGATTGG ATGAGGCCAG GGTGCTCTCT TGGAGTCCTT TCTGTAAGGG CAACTGAT

SEO ID NO:426: (Length of Sequence = 417 Nucleotides)

GOCTGENTCA TOGCTGTOCT TTCCTCCTTG TCAGAGTCAG TGACACTGAC ATTAAGGTCA TCGAATATCA ACCAGGTCCT
GAGGACCTTG GTGTGTTTCC TCCTCTCCTA GTCTCCAGAC CCCAGCCTGT TCATTCCTGA GCTTCCTCTG GCACCCCTTC
CTTGGGGCCA AGCCAAGTAA GAAATCAGCA GGCCCAAGGT GGTGCTTGGG AGGCCGGGGC AGTGCCAGGG GCAGTCCTCA
TACCATCCTC CCACTGGCTT CCCTCCTGCC TGCTCTTAGC CGCCACACAT ATCTCAGCTG TCGAATCCGA TTAGGGNTTC
TCNCCAGTGA GCCAGACAAG GAGGCCACTN GGCAGGGGAG AGAGAGACAA GGACGCCAAG CAGGGATTGG CAGAAGGAAG
GTGGAGACAT GGCTCAA

SEO ID NO:427: (Length of Sequence = 317 Nucleotides)

AACCCTGTCT CTACTAAAAA TACAAAAAAT TAGCTGGGCG TGGTGGTGGG CGCCTGTAGT CCCAGCTACT CGGGAGGCTG
AGGCAGGAGA ATGGTGTGAA CCCAGGAGGC GGANTTGCAG TGAGCCGAGA TAGTGCCTCT GCACTCCAGC CTGGGTGACA
GAGCGAGGACT CCGTCTCAAA AAAAAGGGCT GATAATGATA AACAGTGAGC ACTCCGGTCC TTTTTCTTAC GTTTTCCTTT
TTTCCTTCCT CTCCACCCCA CAAGTTTTGC TTTTTAACCA AGGTGTCTCT GCTTGATGGA AATTCACATG CTAGTCT

SEO ID NO:428: (Length of Sequence = 296 Nucleotides)

GTAATTACAG TATTINCACE TAGAGACGG TITCTCCATG TIGGTCAGGC TGGTCTCGAA CTCCTGACCT CGGGTGATCC
GCCTGCCTCG GCGTCCCAAA GTACTGGGAT TACAGGTATG AGCCACCGTG CCCAGCCGGT TITTTTTTTT TITTTTGTAT
AGCAATGGAA GAATGGCCTC GTACACACGN TAGAGTGGAA AGTCCCAGGC ACCAAGGNIT CCCACCCTAG AAGCAAGCTC
AGGGCTTTCT CTTCATCCTT CCAGGGAGAG CACTGAGAGA TGATGGGGG TTGGCA

SEO ID NO:429: (Length of Sequence = 422 Nucleotides)

GAGGGITGGA GACAGGAGCA AGTGGGGTGG GAAATCCAAA TCTCAACTGC TTTTGTACTG TCTCCTGCTC CCGAGTGCCC

CANAGCCCAT GCAGACCCTC TGCTGTCTAT GATATCCTGT TCAGGCCTCA ACTTTCTTA CCATCCCTGC AACTGGGGTT

CACTGTGAGC CAAACCAGIT TGCTTCTTGT TTTCTAAAAG CAGGCAGCCC TTCAGGACTG TNTCATTCAA GGCATTTCCC

ACCTCTNTTC TCCACTCATA TCCCTTCCCA AACTGCCTTT CCTCATTTCT CCGTCTCCAG GGAGAGGGAC TNCAGGCTAC

CACAGNCAAA AATGGTGGTC TTCAGTCCTA CGTAAGNCAA NCTGTGTGAG TGTGTAAGGA CTNAGGGTTG CTCACAAGGG

GACACACAGA

SEO ID NO:430: (Length of Sequence = 332 Nucleotides)

CGCGATCAGC ACCCGGGACA GCGCCACCGC CCACGTGCAG GGGNTGGGGT CCGGGCGGGG CINGCGCCTC GGCGTCTCCC

GCGAGTNTCC CGTCCAGCCG TCGAGCAGGG TGCTTGANIN TNTCTGCAGA AAAGACTCTA GGACCCCGCC ACCATGTTCC

CGGAGCCCCCC AACCCCGGGG CCTCCATCGC CCGANACGCC TCCCGACTCC AGTCGCATCA GCCACGGCCC AGTGCCCCCC

TGGGCCCTGG NCACCATCGT GCTGGTCTNA GGCCTCCTNA TCTTCAGCTG CTGTTTCTGT CTCTACCGGA AGAGCTGTCG

GAGGCGGACA GG

SEQ ID NO:431: (Length of Sequence = 413 Nucleotides)

TGTCATTATT TAAGATGGGG GACATCCAAG CACCTGGAAC AAAAAGGACA CTAAGAATGG GAGAAGAATA CACAAAGGGA
GGTAGTACAG GGCCAATAAC AGATTTTTGG AATTTTTCAA ATTTCTCTTT GAAGTAATTT TACAGTCAGT AAATGGAAGT
GGAAAAGAGG AATAGAAGAG CATTTCATTG ATTTTTTTTT TCTCTTGTAC TTACACATCT CATGACCTCA TGTTCCCAGA
ACTTAACACT TAGTTGGGTT CTAGTAGGATA TTTTGGGTTG AAAAGATGTT TGCTGTTTTG CATTTTGTTC TGTTTTGTTG
GCTAGCCTGT GAATCTAGCA TTGTACGTGA GAAAGTGCAT TTCAGATTGA AAGCAACTGG GTTTTGGAAA TGAACTTCAA
TAACATATCC CAG

SEO ID NO:432: (Length of Sequence = 292 Nucleotides)

TICACCGIGT TAGCCAGGAC GGICTCGATC TCCTGACCIT GIGATCIGCC CACCICGGCC TCCCAAAGIG CIGGIATTAC

AGGCGTGAGC ACCGCGCCCG GCCACCATTC ACTAATTITC AAGAAATGIG GAAGIGITCT ATATTINCIT CCCACTCCAT

AGCTCCAACA TIGITGGCIA TIATGAAITT GGCTATTAAG TGATGCCAAC AATATTIAAT GAAAAAAAGA TATAGCAGTA

TAGITGAAGG AGGAAGCTGA AAGAAAACGG TCCATCNGIG AGGAAAAAGGC CC

SEO ID NO:433: (Length of Sequence = 335 Nucleotides)

TITITITCIC AGCAGAGGAT TITATIGGIG GICACCIGIG GCACAGGITA GAGGAGCCGA AGIGCIGINI TIGIGGIGGG

GGGGGGACCA CAAACCCCGG CCCIGCCCIC TIGCTIACAT AGGCTICCGG CCTAGAAGGG CANCATGAAC AIGCCGCIAC

GGAICCGGIT GIAGICIGGG AGCIGCICAA IGGGGCCATA ICCAGCCACI GCIGGGGCAC IGGICATAGA IGIACTINGA

GCAGAICICA CGIACCACAC IGGCAICCAC CICCGCAAAI CCGGCTITCC CATICAGCCA GGGGGGNAIG CGGGNGGGCC

ATAGGICAGG AGGCT

SEO ID NO:434: (Length of Sequence = 390 Nucleotides)

GTGCTGACT GCTGATTGGA GATGACGTGT ACCCATCCTC TAGACAGTCT GTGCTTTCC TGTCTTTGGA GCTTCCAGTT

CCACCCCCAT CAGTTTTTT CTGACCACTC CATCTTGCCT TATTCTCTC TCTTTCCTTT TGACTGGAAG AGIACTCATC

TTTTCTAACA TCTTTCCATA AACTGTTTTG ATTTCACTTA TATTGATTTT NAACGTATAA TGTGCTGGTG TTCTATTTCC

TCAGTTAGAT CAGAAGGCCC CTAAAGACAG GGCTCCATTG GTGTTAAACT GCCATCTTCA AGGTCTGGGA CTTGATTTCN

#### CTITITINAC CINCACAACA AGGCACTCCT CTIGCACCCA GTOGGAATIT CAGIGCCTGT GGGTCAAAGT

#### SEQ ID NO:435: (Length of Sequence = 427 Nucleotides)

TCACTAAACA GIAGATTTAT TITATGIAGA TITGITITIC TATAAAAATA TATTTATGIG TICACAGGAA AAAAGITGAG
TTGGIATGIG GGGGIGACIT TCAGATACAT AATTAGITAA AGGITTGCIT ATGAAGITAG AAGGCATCIT AGCITITATC
ATTTICAAAT TITTCITCAT AAAAAAGAAC ACCCIGIGAC AAAGATAAGG TAACTGAGAT TATTATTAGC ACTITTAGAGT
TGAGAGAGIT TGAAATAAAA AGGITAAGCA ACCTGCCTAA TGITTATGIA CAAAATCAGT GCTGGAGCCA GGAAGAGAAT
TTGGATTTIC CCAACCCTIG GACAGITCIC TAGGGACTCA TGCCCACCAA CCATTCITGA GACTATATAC AATCAATTAC
ATTAAAATGA TATTGACAGT AGACTAG

## SEQ ID NO:436: (Length of Sequence = 249 Nucleotides)

TCAAATAACC AGGAGGGGGA CAGAAGATGA TGGCAAGGCA GACTGGGCAG TGTTTTNTAG ACACAGAACA AAGAATCAGA
ATTTGAAAAA AGANGAAAAA CAAATCINCG CAGCTGCAAC TTTAAAGTAT CACCTTTATA GATGGCAGG ATTTCCATTA
TGCAAATGGA ATCTAAGATT TCAATGTGNA ATCTTAGAAT GCAGTTTTAC CACTTGCAGT CINGTATTTG TGGTGGCCAT
GTGGTGAGT

### SEO ID NO:437: (Length of Sequence = 404 Nucleotides)

GICATICACC CTAATCCCTC TITCACCTTC ACAGAACTIT CACACTCCAA TGTACTTGCT GTTTGTAGAT GCTCCTATAA
ACAGAAAGCT CTGGGAGACA GGTGTCTTGT TATTCTTGCT CTCTGTCATA TCTCTGGGCC TATCACAAGT ACTCAAAGCA
TAGAAGTTCA ATAAATATGT GTTCAATGTA AGAAATGATC AGTGATTCTC AAGCTGCAGT GGCGTCAGGA TAACCTAGAC
AGCCTGTTAG CACGGNTCAC TGNNCCCAC CCCCACAGTT TCAGGTCTGG TCTGGGNTGG GGCCCAATAA TCTGTATTCC
TAAAAGTCCC CAAGCAATGC TGGTGCTGTT CGTCCAGGGA CCATGCTTAA AGAACCACCC GGAATAGGAC TGGTGGACAA
AAGG

### SEO ID NO:438: (Length of Sequence = 337 Nucleotides)

CTGCAACTTA TACCTICCAT TTACTAAAGT CCCAGIATGI GICAAAGTAG TITICATICC TCACAGCCAT GITATGAGCT
AAATATCACT AACTITICCCT TTCAAAGGTG AAATAAACTG AGACTCTCGA AGATTAACTT GCCCAAGGTC ACCTAGCTCG
TTAGGAGGCA CAGGTGGGAC TTGAACCCAG TTCTTTCTGA ATTCAAAAACC TCCAAAATGT CTGTCACATC AAGCTGCTTC
AATGAGATGC TAGAAAATCA GGACAGTGAG CAAGCTGGAG ATAANGGAAG ATATGGAGGA ACACGGGAAG TGTGATCCTC
ACACACATAC CCTGCAG

## SEO ID NO:439: (Length of Sequence = 380 Nucleotides)

CATCGIGIAT GAAGGIAGCC ATTITGIACA TGITACCITG TIAAAAACAA AAGAGCAGCA ACATGITTAG AGIGGIGICT ATAGATAGAA CACIGCIGIT ATGITTAAGG AAAATTGGGG COOGGCAGA AAAGATCAAT ATGACTAGIT AGAAGACTAT TAAGGAGAAC TTIGIACATG AATTATGGAT GIAAGAATTA GAAAAAAAAA GATGATCATG TTCAGAATTT TAGCTTTTTT ACAATTGIAG TGGAAAAGAA AACICCTAGA GTAATGAATC AATGGIATCC TACAAAAAGA GAGGIGCCAA AAATACCATG AAATATTATA TTAAAAAAATT CACACGNATA GGIAGITTATA ATATGIAAAG GCCAGACTTC

#### SEO ID NO:440: (Length of Sequence = 335 Nucleotides)

CCCTGAGCTT TTATTGACCA GTGGACTGTG ACTITTGATG TAATTITATT TTTGAGAGAG GGTCTTGCTC TGTCACCCAG
GCTGGAGTGC AATGGGGTGA TCTTGGCTCA CTGCAACCTC CGCCTCACGG GCTCCAGTGA TTCTCCTGCC TCAGCCTCCC
GAGTAGCTGG GACTACAGGT GCACCACCACC TTGGCTGGCT AGTTTATGTA ATTTTTTGTA TGTCTGTGGA GACAGGGTTT

550

CACCATGITG COCAGGCTGG TCTCAAACTC CTGAACTCAG GTGATCTACC CGCCTTCCAA AGTACTGGGA TTACAGGCAT GAGCCACCAT AATAA

SEO ID NO:441: (Length of Sequence = 356 Nucleotides)

ACTAATIGIG TITCIGCTIC AACCIGCATI TOCAGAGGIG COTGITGGIC TGIAATIGGI TOTGGCATGI TIATAGGIAT TACAAAAACCA AGICTTATIT TGCATITCAC AGGATITAAG ATGAATAAAG TGAIGIGGIT GIGCTAGGIT AGAGITGIAC AAATTATACT COCATCGCG ATGGIGGCGT COCAGGCCTA CAACCIGACC TCIGCCCTCA CGCCCATCGI CACGCGCTCC CGGIGGTICA ACGAGGAGCC CCTGACGCIG GCGGGCTTIC AGCAGGGNCC CGGCCAACCT CAGIGACGIG GIGCAGCTCA TCITTCIGGG TGGGACTCCC AATCCCCTTT CCCTTT

SEO ID NO:442: (Length of Sequence = 371 Nucleotides)

GATGATTTIG TATCTITTIC TATTIATIGA GATAATCAAA TGATTTTIGI CCTTOGITCI ATTGATGIGA TGITTATIGA
TCATGITTAT TGATTIGCAT ATGGIGAGCC ATCCTTGIAT TCCTGGIATA AATGCCACCT GATCATGGIA TATNATCITT
TINATGIGCT ATTGGATTIG GITTGCCAGT ATTTTGTTGA GAATTTTTTC ATCTGTGTCT ATTACGGATA TTGGCCTGTA
GTTTTTTTTG CTGTGTTCTT CTTTGGTTTT GATATCAGGA TAATGCTAGC TTTGTAGAAT GAGINAGGGA GGAGTTATCT
ACTCTTCAAT TTTTGGGAAC AGTTGCAGAA CTGTTGTGTG TTTTAGAACA G

SEO ID NO:443: (Length of Sequence = 329 Nucleotides)

TGAACTGCCT TTATTTTTIN ATTTCCCATC CAGAAACCCC AGTGTGATGG TGGAAGCAGC ATGAAAACAA CATCTCCCCA
GGCCTCGCAG TAGAGGCGAA GGGAACAGAG CTGCCCATGT GCCTGINTCT AAAGACGCCA CCCTCAGGTT GATGTCACCT
GTGGGAGACC GGGTCCACCT ACAGACACCA GGTGATGGTC CACCAGGCCC CAAGCTCCAG CCTGCTGAGT CCCCAAGACAC
CAGGCTCATT AAATAGCTTC GTACAAAAAAC CCAAGGGTGT CCCTCCAGCT GGTAAAAAAAT TGGGCAATTT CTACTTGGAG
GTCTGCTGT

SEO ID NO:444: (Length of Sequence = 358 Nucleotides)

TTTTTTTTA AGIACATAGG TCTTTATTTA AACACTGATT TTTTTTTTAA ATATATACAC ACAAAACTTA GTCAGCAAG
GCTTCATGAT ATACACCAAT TCCAAAATAA AACAATCAAA TGGTCCAGGT GTAGAATGCC AGATTCCTTT TATCATCTGC
GAGGAAAAGA GAAGCAGGAT GAGGAAGAGT GAGGGAAGGC GGGGACAGGC TCTGCCCAGA MGAGCTGCCG CCTCCTGGCA
CAGCAAAACGC TCCAGGCCTG GGCCCTGTTC ATATCTGGAG TCGGAGGGAG ACTCCCATCG GCCGCTTTGG GACTGAAAGG
CCCAAGGCTG TCACCAGGTC CCGGAAGAGA GGGAGGCA

SEQ ID NO:445: (Length of Sequence = 302 Nucleotides)

TCAGAACGET GAGAAATAAA TIGCIGITGI TIATAAAGIA ACCIGITIAT GITATTITIT TATAGAAGCC IGATCAGAAT AAGACAATAT TGGATAGAAT ATICAGGAAT GICIIGCCTC CAATGITGGC CCCCCTGIAC TGAGCICTAA TCTACACICA CCTAAAAAAAT TATAAAAATCA TAATAAAACT GAAAAAGTCA AACTCICAAT TGCATCCCAG CACAAATATC ACAGNIGNIT ATITAAAAAA TTATGICAAG GCCCTAAAAA GCTAAAAATCC NCAGNICIGC TAATATTTCT CT

SEO ID NO:446: (Length of Sequence = 367 Nucleotides)

 TTACTTCAGT AAAACAAGCC ACAGCAACAT TATGCTCTGC AGAGTCTTCT GTTCACCTTT GGGATGGAAA AGAGCTGCTT CTCCTAGGGN GGCAACTAAG GCCCAGGACC AAAACTCCCA TCTCCTA

### SEQ ID NO:447: (Length of Sequence = 295 Nucleotides)

CIGCAAACCC TICAGCATIT AGCIAAAGIT AITICACAAT TCAATGCITG TCTIGCACTG TCCIGGICAT TTAAAAACIG
GIATCICITC AATAGCAAAT AGIATCATAA CAGACCACTA AATTIGGAGG GAAAGIGGIT TCTATIGCAG ATGGATGIAA
TTAAAATTGG TGIAAATCAC AGGGIACAGA ATTCTTATCT GGIAAGAATT CIGACTITIT TITTAAAGAA GAAAAAATAT
ATCCAGATCT GIATCCACAT GCTATITAAA TGCTCAGGNC AAAAAGAAGC CACTA

### SEO ID NO:448: (Length of Sequence = 233 Nucleotides)

CAGAATCAGC CCAAATGCCC ATCAATCAAC TGTGCATAAA GAAACTGTGA TATATATATA TCATAGAAGT TCAAACAGAA AAAATACAAA AAACTTAGCA GAGGATTGTA TCCTTTGCCG TTTATTTTGA TGACCATGCC ATCTTCTAAT CCCCAGAAAA AAACTGGAAA ACAGAATAAA TATAATTTNC TGATTATNCT TATGTAACAT AAATGGAATA TATATATATA TAT

### SEO ID NO:449: (Length of Sequence = 341 Nucleotides)

ACTICCITCC TCAGGCTCCI GIACCAATCI TCAATICACI TGGGATGICC TAGICIAAAA CATITATITC ATTIGAAAGG
AAAAATATCA ATTICIATCI AAATIGGAGI AAGATICAAT TCAGATGIGI TTATITACAA AACATAAGIT TGITATITAT
CTGTGTITIAA TTTGATCCNG GAACATIACA TGIAAAGAAC ATTCCATGIA AAGAACCAGG CAACTITGGCC AGGCATGGIG
GCTCACACCT GNIAACCCCA GCACTITIGG GAGGGCCAAG GCAGGIGAAT TGGITGAGAC CAGGNGGITC AAGACCCAGC
CTGGGGCAAA TATTGGCGAA A

### SEQ ID NO:450: (Length of Sequence = 313 Nucleotides)

TTTTTTTTT GACACAGITT CCAGTCCIGG AAACCITTAG CTAATCITTA GCATTCCITC AATGGGGGA ATGGGCAACA
GATCACCATA GTATTAATAC TCTGTGTAAT TTTATCACTA GAATGGTTAA TTTCCATATC ATAGTAGAGC TGTTGCAGAT
ATTTTGAAAT CCCATTATAC TCACTGCCAC TTCAAGATTA CTGTAGTTGT TAGAACAGCT GCTAGATCTT ATTACTTAAT
AAATTAATAA AGTGTGAATA TAACTATATA ACCATTTTNA AAATGTTTTT TGGATAACTT TCAATATAAT TGG

## SEQ ID NO:451: (Length of Sequence = 351 Nucleotides)

GOGCOGGCIC CIGGGCACCC ACCCAGCICA TICGCOGAGC GGCICCCCIC CIGGGGITGA GIGICCIGGG CCIGAGICIG CAGCCICAGC CATCIGITCC CCAACTIGAT CICCCACTGC TAGITACAAA CAAAICGCCC GGCITGIGCA AACCICCIGG GCICAGICCC CAGICCCGCG GGGCATCAIT TCATICITTC CIAGCCIGIA AGGITICICC TGAAAAAATCI ATIGITAGIC TAATATGAAT TICCIAATAT GIGACITAAG GCITITCICT TGCIGCITIT AAAAITTICT CITITGICIT TGACTTIGAC AATITGGCIA TAATGIATGI TGGAGAGGAC C

### SEO ID NO:452: (Length of Sequence = 363 Nucleotides)

GACAAGGGAG AATTCTTGCT TTACCTATG ACTGGCTTAA GCCGTGTGGC ATCCGAGGAA TGTTTCAAAT GTGTCTGTGT
TTCTCTTTAC ATTCCTTATT GTACCTCATT GTTCAATTCA CTTTTGTAAA TTCCACCTAA CATTTAAATTT
CTCCGTCATG AAGTTATTTT AAGACACTGG AATAAGTGCA GCTTTGTTTA TAACAGCATA GGATTATAAA CAACCTAAAG
AGTCAGCAGT GACATTGATG GCACATGCAT ACAATGGAAT ATTCTGTAGC TGTTAAAATA ATAANGAAGA TCCTGCTCTG
TGTATTTGAT ATGGGAAGGC CCCCCAAGGT CTACAGTTAA GCG

SEQ ID NO:453: (Length of Sequence = 382 Nucleotides)

ATGAGGGAAA AGATGGTGCC ATTGAAGATA TTATCACAGT GCTGAAGACT GINCCCTTTA CTGCTCGCAC CGCCAAGCGT
GGCTCTCGGT TTTNCTGCGA ACCTGTTCTC ACTGAGGAAT ACCATTACTA AACTATTACT CTTTCTCACC TGATGCTCTT
AAAAGATCTT AGAAACCAAC CATACAGACG AGCCGATGCG GTGAGGAGAA GCGTCAGGCG GCGCTTTGAT GATCAGAACT
TGCGGTTCTGT TAATGGTGCC GAAATAACAA TGTGAACCTG AGACTGGCCT GCAATGAATA CAGGGGTGTG CGTGTTCAGG
AGGTTTTCTG TTGCGGTCAC CCATGATGCC GGGCCTNCCC ATTTGGGCCA ACTTTTCCTG GG

SEO ID NO:454: (Length of Sequence = 391 Nucleotides)

SEO ID NO:455: (Length of Sequence = 282 Nucleotides)

TIGAGIACTO ATTIGAGGAC TGCAGICATA GATITAAAGT GIAATCAGTO AACTCAGTGG AATTACTITC TCCATTAATC
TIGAGATGCT TCAGGACTGT TICAGCCIAA GCCAGIAGCT GGGTTIAACC AAATTIGAAG ATTITINCTAG GAGAGITTGG
CACGAGGAGA GAGGGCAAA GGCGIGITAAG GCAGTGTTTA TAACAGIGGC CCATGGAATT GATCATGGGT AAAGAGAAAA
CAAGGACATG CGAGGAGGTG ATAAATAGAN CAAAACAAAG CA

<u>SEO ID NO:456:</u> (Length of Sequence = 340 Nucleotides)

CTAACTTATG TITGAGATCT TCAATGAAAT TAGITACTAA TATTINGCIT TATTCTTCTC AAAAGATTTA ACATGATAAT
TCTGACCTAA TCCAAAAAAA AAAAATTCAT GGGCCACTGT TITGCATGTA ATATGTAAGA NCTCACCTTG ATGITAAACT
CCAACCCTTG GCTGAAACAG GTTAATGATC ATTTGTINGTT ATTTATTTCT ATAAATAGTT TGAAGTTGGC CAGGCCTGGT
GGCGTCTCGC TGTGTCTCCC AGGGTTGGAG TTCGGTGGCG CAAATCTCGG CTTCACTGCA AGCTTCCGCC TCCCCGGGGT
TCACACCATT CTTCCTGCCT

SEQ ID NO:457: (Length of Sequence = 338 Nucleotides)

ATGAAAAAGT CICCAGAGAT TATCAGTGGG CGGATGACAT TTGCCCTCTG TTGCTATTCT TTGACATTCA TGAGATTTGC
CTACAAGGTA CAGCCTCGGA ACTGGCTTCT GTTTGCATGC CAGGCAACAA ATGAAGTAGC CCAGCTCATC CAGGGAGGGC
GGCTTATCAA ACACGAGATG ACTAAAACGG CATCTGCATA ACAATGGAAA AGGAAGAACA AGGTCTTGAA GGGACAGCAT
TGCCAGCTGC TGCTGAGTCA CAGATTTCAT TATAAATAGC CTCCCTAAGG AAAATACACT GAATGCTATT TTTTACTNAA
CCATTCTATT TTTATAGG

SEO ID NO:458: (Length of Sequence = 370 Nucleotides)

GITTTCTTC GGAGCTGAAC CAAAGAATGT GCACCCTCTT TCTCTAGTGC TGTGGTGTCT GCTTATTTT GTATTTGTGC
TTTCCATCCA TCTTCTGTGA TCACAAGGCA TTCTTAAGGT TTTCTAGCAC GACTTGCGGA CATCCAGACT CGTGGGGGGC
CCACCCATGG CTCGGTAAGC CAGCAGCCCA GGGCACTGCC ACTACCATGA GGCACTGCAT TAATTGCTGC ATACAGCTGT
TACCCGACGG CGCACACAAG CAGCAGGTCA ACTGCCAAGG GGGCCCCCAT CACGGTCACC AGGCGTGCCC CACGTTGCAA
AGGAGGAAAA ACAAAATTCC TGGTTTCCGT GTGGGACAGT AAAGCAGATG

SEO ID NO:459: (Length of Sequence = 339 Nucleotides)

ATTITICCTAG AACTGAAATC ATCTACGGIT CTCAGAGCTA AACTICCAAA GCTACAGTCA GCAATTITIC ATCAGAGCCC
AAGGGAGGG GGCCAGGGIA AAAGAGACGA GACTGIAGAG AGGCATAGAG AGACCAGTAG GAAGAGGGIG GGAGAGGGCA
CTTATITICIC TCTGICCTCT CAGTGGGITA CAAATCAGAT CTGGTGACAA CACTGAGGGG GCCAGGTCAG GGTATGINGA
TGAGAAATGA CACTGGAAGG AACATCAAAG CCGGAGCTAC AAAAAGAAAG TCATCAAGCC CCAAATAGAA GGGGAGCCT
CCCAGTGCAC CTCAGAAAT

SEQ ID NO:460: (Length of Sequence = 380 Nucleotides)

GAGCITTIGC ACTGCAAAAG GAACAGICAG CAGAATAAAC AGACAGITAG AAGTACITCC CIATGIAGAG ACACACICAA
GTGAAAAGGA ACCAGGCICI ACCACITGAA ATAAGGAGIA TCAAGGAACI TGIGGACAGC TIITAAAACI ACCACIGGCA
ACTAGGICIT GAGGIGGATA AATGAAGAAA TIIGGGGAAT CTCACACIGG AGAIGITIGA TGIAGGIAAA TGANCIGAGA
TTCATTAGGI GIGAAATAAT GAAGIGIATA TATAGITCIG CATATACATG CCIGGGGAAG GIATAATATT CAGAGGCATA
CTATCACICA ATITGIATCI GCIGIGGGCC TCAGACAGIA CAGGGGCAGI GIITGCATIG

SEQ ID NO:461: (Length of Sequence = 317 Nucleotides)

GTCATTAGA AGCCITTATT GGGITATATT CAATTIGACC TCCCACCAAA TTAAGCGGA AAAAACAAAA AAATAAGAAA
TCCCAGTAAA AGAGCCCCTC AAGATTTCAT AAACTACAAA CTAAAGCTGC TAGTTAATAA GGAAATGGCA GAATTTTCAG
AGCTGTATAA TACAAAAATT CCTGTAATTT AAGCAGATGT TTTCCTCACT GATGACAAAT CTTCCAACAC AATGTGAAGT
TATGCTACTT GGGATATTTG TAGGCAAAAC CATTTTTTTT TTGTACAAAA ACAAAAGCAA GGGACCNIGG AAAAAAA

SEQ ID NO:462: (Length of Sequence = 261 Nucleotides)

AAAAAGGCCA TAAATCCTTN CCCTCGTGGA GCTTACCTTC TAATAAGGAG AGACAGAGGG TNAGAAACAA ACAAACAAAA ATATGTNAGT TAACACAGAG TGTTGGAGGG TGTCAGGTGC TATGGGAGAA ACGTGGAGCA TGTCAAGGNG AGAGCAGGCA AGAGGGCATT CTGGAAAGGC CTAGGANGAT GGTGACATTT TACCTTCATA TCCACCAACC CCCAGCACAA AGCATTTTCC AGAGGNAGNC AGAGGAGGGC A

SEO ID NO:463: (Length of Sequence = 387 Nucleotides)

ATACAAGTAC ATCCAGGAGC TATGGAGAAA GAAGCAGTCT GATGTCATGC GCTTTCTTCT GAGGGTCCGC TGCTGGCAGT
ACCGCCAGCT CTCTGCTCTC CACAGGGCTC CCCGCCCCAC CCGGCCTGAT AAAGCGCGCC GACTGGGCTA CAAGGCCAAG
CAAGGTTACG TTATATATAG GATTCGTGTT CGCCGTGGTG GCCGAAAACG CCCAGTTCCT AAGGGTGCAA CTTACGGCAA
GCCTGTCCAT CATGGTGTTA ACCAGCTAAA GTTTGCTCGA AGCCTTCAGT CCGTTGCAGA GGAGCGAGCT GGACGNCACT
GTGGGGCTCT TGAGAGTCCT GAATTCTTAC TNGGGTTTGG TGAAGATTTC ACATACAAAT TTTTTGA

SEO ID NO:464: (Length of Sequence = 397 Nucleotides)

GTTAGCCGTG GCCTGTGGGC GTCGCCTGAA CGTACCAGGT ATTGTGGCTC CATTGGCTGA GGATGCTTCT CCAGCGAAGG
AGGCAGGGAG CCGGGGAAGT GGGGTGGGGT CGCGACACCG ACAGCAGCTG CCAGACCAGC CATGCTGCGC TCAGCTCCCT
CAGGCTGTCA CTCTTAATCA TCATGTCACT ATCTCTGGGG CGTGTCAGTC ACCATCAACG ACGTGTCCCC CAAGCTGCAG
AGGACGCAAA TCCAGCTCTC CAAGAGGCTC TGTTGGCCCT CTCCACATGG GCTTNAGGGT CAAGGGTTGG GGGCACGTTC
GGACCGNCCT TCCTGNCTCT TTNGAAGAAG ATCCTCCAAN GINCCCGGCT TCAGCTTCTT CCGGGCCTCT TTTGGCA

SEQ ID NO:465: (Length of Sequence = 320 Nucleotides)

SEQ ID NO:466: (Length of Sequence = 352 Nucleotides)

CATTGIATTI CCCTICITCA AATTAATIAC CIACCAAAAA ATGGAAAAGA ATTITACATG CACITIAAAA TAGTAAAATG

GAAAGTGAAT TITTAAAATA TATGCATTAA AAGTTTACIT TAATTICCAG TGGGACTICC TITATGAAAT TITCCATAAC

CICCTICCIGG AGTATTACAA GATCICCAAC ATCICATAAA CTAATTGIGA TATTAGIGGA ACCATAAGCA AATGTATATT

TITAGIGGAA ATAGATTAIG AATGAAAGCC AAGCACCITA CITTAAAGCC AAAATATGAG ATTITCCAIT AAAAACCATT

GGICCATAAT AGGGAGGGG GITTITTAAT TI

SEO ID NO:467: (Length of Sequence = 352 Nucleotides)

TGAAAGCCAA AAAATAAATA AATAAAAATA AATACCATIT GCAGAGACAG AGAAACCATC AGAAGAAGAC AAGCAAGGIT

GTITGAATTA CTACGCCTAG AATTTAGAAT AACTACTATG ATTAAAACGA AAAAGGCTIT AATGGATAAA ATAGATAGCT

CCTAATAACA GATAGTAATA ACATATGGGT AATGTGAGCA GAGAGATGGA AATCTTAGAN CAACAACAGC AACAACGCCA

AAGCGTTAGG GATCAAAAAC ACTGTAACAA AAATTAAGAN TCCCTTTTAT GGGCTTNTTA ATAGNCINGG ATACAGGTAA

GTAAAGAATC CCTGTGCTTT AAGGAGCCAT CA

SEO ID NO:468: (Length of Sequence = 336 Nucleotides)

TEACATCIGC ATCITACATT ATTAAATGCA AAGGAATATC AAAGACTCCT CTGCTAGAAC CATTITTATT CATAAAGTCA
CATTATCATT GIAGAAGTCT TGTAAAAATG CTACCTGAAA TGAATTATGT CCGTCTTCCC ATCTGGCTTA CAAAATTCTT
GAGGAAGCAT CTGCCTCGTA GCTCTTTATC TTTCTATTTC CTACTACAGG GACAATGTAT ATGGAAAGAT AAATGTGTGT
AGGIGTATAA ATTCTCAATA AATATTTGCT GAATTAGATT GTACAGTTGT TATCTTTTAA GNITAACTCA TCCTGAGGTA
CATTTTATTA TTGGGC

SEO ID NO:469: (Length of Sequence = 156 Nucleotides)

GACCGATGIA GAATICIGIC TOGAGACGIT CTCCCCTTCA ATTCAATGGG AAGGNICITT TCTGGCATGA NCTCTCCGAT

GTCIAATGAG CTCTGAGCAC CATCCATAAG CTTINNCACA TTCTTTANAT ATAAAAGGIT TCTCTCCACT GTGAAT

SEO ID NO:470: (Length of Sequence = 350 Nucleotides)

TICICATGIC TGAATITCAC ACGCACAAGT CIGAAATGIG AAGGITTCIT AATGITGGIT TIATGGITCG TGIAAGATIT

TIGGGAAATG AAGGGCICIT CATTAGGATA AAATGGICIT AACTICCCAG AGAAGAATIT CCIGACAACG TGGCTGAAGT

TAGATACAAA TGITAATATA GAAGANIGCT TITATTIGAA TITCTAGCAA ATGGITTICA ACTACITTAA ATATGACCNA

CITGAAAGIA TIATICCINT TITAAAACTA CITTINATGI ATAGATCTAA GGICTGCTIG AAGCTAGTAG GITAAAGIGT

TIGAGAAATA AAGGCAAGAT INIINCNITA

SEO ID NO:471: (Length of Sequence = 270 Nucleotides)

GEAGCAGGGC TGGGAGTCAG TGGGAGATTG GGAGTCCAAG TCTGGACATG TTACATATGC TATGTCTATT ACAGATCTGA

GTATAAATGT GAAGTGGAGT TTTACCACGT GATTCTGAAG TTCAGAGAAG AGGTACAGGT TAGAGATAAA GATTTNGGAG

TCACAAATAT AAAGATGTAT GACTTNATGA GATTACCAAG GAAGTGGAGA TTAATAGCAA AAAGAAAAGT TTCAAGCTTC

AAGCCCCGAA GCATTCTAAT GTTTACAGCT

SEO ID NO:473: (Length of Sequence = 345 Nucleotides)

TTTATIGIAG TICAAATACA TAAACIGAAC ATICAAACAT CITAAAATTA AACITTAGCA ACAAAGITTA ACATICAAAC
AGGAGTATAG TITACAAGAA ACACCCAGAA AGGIAATTIG TIGICIAATC CAGAATATIG ATAAAGATCA CITAATGGIG
AATAAAATAT GITTAACCAG TGGITCTATT CIGGCCAACA TGITAGTTAT GACCGIGGIT CCATACCIGA GAAGAAATTA
CTACATAAAT CITCICTTAG GCTAAACAAC ANGACTCGGI CTATAATTCA GAGGGGATAA TCAAAGCACG TAAGGGTACC
AAAATAAAAC TAATCIGATC TITAG

### SEO ID NO:474: (Length of Sequence = 433 Nucleotides)

CAGAATTAGA GCTGTACCCC AAGGGGGAAT TCTGTCCTAG GAGACAGTGA GINCTAAGTA CACTCTGGAC AAGCACCAGA
CACAGAAGCT GCCTCAGTIT GTGCTCCCCC TGCAAAGCAG AGCCTGAGAC AAGGATTTGG GTACAAGGAG TTTCACTCAA
TATTATATTT CCAAGATGCA CCCATGCTIT ATATGGCTAT AGTGCATCCA TTTTACTGCT TTATACTTTC CATTAGGTGA
CTATATTAGT ATATATTAT AATTCCTAGG TCTTTTTGIT CTCTTATTTG TTAATAATTA TAAACTCCAA GCCCATTGTG
GTAGATTGCT ATTTCTCAGA GATATTTTCT GCTCCTTCCT GGGGGACAAT AATACTNITC TCCCATCAAT GGCAGATGIN
GGGCTTGINA CATTTTCTGG TCAATGGAAT GAG

SEQ ID NO:475: (Length of Sequence = 427 Nucleotides)

GATATGGTTT GIGIGCCCAC CCAAATCTCA TCTAGAACTG TAGTITCCAT AATCCCCACG TCGTGGANGG GACCTGGTGG
GAGGTAATCG AACCATGGGG GIGGTTACCT CCATGCTGTC CTTATGATGG TGAGTTCTCA TGAGATCTGA TGGTTTTATA
AGGGACTTTT CCCCCCTTTG CTCTGCACTT TTCCATGCTG CCACCACGTG AAGAAGGATG TGTTTGCTTC TCCTTCCACC
ATGATTTAAG TTTTCTNAGG CCTCTCCAGC CATGCTGAAC TGTGAGTCAA TTAAACCTCT TTCCTTTAAA AATTACCCAG
TCCCAGGNAT GTCTTCATTA GCAACCTCAG AGCAGATTAG NCACAATTCC ACAACTTGGA GAATNGGTGT TCAAGTTTCA
CTCTGGCCTT NAACAACCCA AAATTTA

SEO ID NO:476: (Length of Sequence = 351 Nucleotides)

CGCCGCTAGG GCGGCNGGGG GTCGGGACGC CGGGCTAGGG GCGCGTCATG TGGCCGCTCA CGGTCCCGCC GNCGCTGCTG CTGCTGCTGT GCTCAGGCCT GGCCGGACAG ACTCTCTTCC AGAACCCAGA AGAGGGCTGG CAGCTGTACA CCTCAGCCCA GGCCCCTNAC GGGAAATGCA TCTNCACGGC CGTNATCCCA GCGCAGAGTA CCTGCTCTCG AGATGGCAGG AGTCGGGAGC TGCGGCAACT NATGGAGAAG GTNCAGAACG TCTCCCAGTC CATGGAGGTC CTTNAGTTNC GGACGTATCG CGACCTCCAG TATGTACGCG GCATGGAGAC CCTCATTCGG A

# SEO ID NO:477: (Length of Sequence = 333 Nucleotides)

GETCTCACTC CETCATCCAA GCTEGAGTEC AGTEGTECAA TCCTCAACTC ACTECAACCT CCGCTCCCGG TTTGAGTGAT
TCTCATGCCT CAGCCTCCCG AGTAGCTGGG ATTACAGGCA TGAGCCACTG TGCCCAGCTG GGATATAGAA TCTAAGAGTT
GATTGTGGAA AACACGTGAA TCTATTGCGC GCATTTNTCA TTTAGCAAGA TGGCAGCAGT CCAGCTGTTC TTTGCAGCTG
GAGATGAACT TTTAAAAATC CCCTTCACAC TTAATGTACT GACCGAGACA GAAGTACCTG AAAAACAGCT NTGCATGGCA
GGCCCGGCAA TAG

### SEQ ID NO:478: (Length of Sequence = 458 Nucleotides)

ACATGITAAA ATAAGGTAAT ATGAAATAAT CTAAAAAAAA AAAAAGTGCA GAACCAAGAC CTCTGTGATA ATCCTATITA
AAAAAATAGC TACAATTITA GITAGAATGI TTCCCITATG AGAAAGCATT TTCTGCATAA CTTTTAATGI ACTGACCTTT
TCCAAGCTTG CTGAGCTGGC CTTTGTCTCA ACTCACTTGG GACACCCTTC CCTGTGCCTC ACCAGGGCCC ACCCCAAGTC
CCAGTTTCTC TAGGGGGTCT CTCGGGACCC CTTGAATCCC TTTNCTGATT TGTGCTGCCT TTAGCAGNCG GAATGGGCTG

GCAGACCACC CTACATNCTC CTGTGTGTGG GGACACTGTC AGENTGTCCT CCCTGCATTA GNCTCTGCTG AGTTTCCTAC CATGTGNCCA GGATGGNGTC CATAGTCGGG GCATNAAGGA CTTAGGATGG GCCCAGTC

SEQ ID NO:479: (Length of Sequence = 360 Nucleotides)

GCATCGIATC INCITTAAGA AAAACACITC ITCAAAATCC TACACIATGA AAAACIGICI TCAGGAATIG ITTATITIGGI CCGITGATCI AGIGAGGCIG AGITCITAAA TCITTCACCC CCAAGITAAA AATIGGGAACA ACAAAACAAA ACTCCAGCAA GCCATAAATA AGATATTAAA GIGCATATAT ACAATACCAG AAAAGITTAG ATIGGGAACA GCCAAAAATTI CTAGIGCAAA AACIGCITIT GCCAGCAAAG CTCCCCTCTCT GGAATCAAAG GGCTACAGIA AAAGITAAAA TIGGAACAGG NITAAGCAAT GICTGICITT AGICACAAGI NAATATATGT GCATGCACCC

SEQ ID NO:480: (Length of Sequence = 322 Nucleotides)

GAAATTAAGT CIAAGCAAAA AGAAAAATAA AATGACGAGT TACTGGGTGC AGCACACCAA CATGGCACAT GIATACATAT
GTAACAAACC TGCCCATCAT GCACATGTAC CCTAAAACTT AAAGTATAAT AAAAAAAAA AAANTGAAAA GCTTCAGCCA
GAGGTCACAA TGCTCACAAC TCATTGACCA AAACTATCTC ATACCCGTNT TAGAGCANGG NGCAGGAAAG CAAAACCATT
CTTCTTACTG TTCACTGGNA TACAAGTTCC ATGAGGGGAT GCAATTININ TCTTGGNCAC TCCTGTGTCC TCAGGGTATA
GG

SEO ID NO:481: (Length of Sequence = 369 Nucleotides)

CCTGGGCAAA GCATTGATCT GGTAGCCTTG CTCCAGAAGC CTGTTCCTCA CAGTCAAGCC TCAGAAGCCA ACTCCTTTGA

AACTTCCCAA CAGCAGGGCT TTGGCCAAGC CCTTGTNTTC ACAAATTCGC AACACAACAA TCAGATGGCA CCAGGGACTG

GCAGCTCCAC TGCCGTCAAC TCCTGTTCTC CTCAGAGCCT GTCATCCGTC CTTGGCTCAG GATTTGGAGA GCTTGCACCA

CCAAAAATTGG CAAACATCAC CAGCTCCCAG ATTTTGGACC AGTTGAAAGC TCCGAGTTTG GGNCAGTTTT ANCACCANCC

CAAGTACACA GCAGAATAGG TACAAGTCAA CCCTACAACT ACTACTTCT

SEO ID NO:482: (Length of Sequence = 255 Nucleotides)

GAGAGAATCT CECTCTGTCG CCCAGECTGG AGTICCAGTGG CGCAATCCCG GCTCACTGCA ACCTCCGCCT CCCGGGTTCA
AGTGATTCTN CTGCCTCGGC CTCCCCAGTA GTTGGGATTA CGGGTGCACA CCACCGCACC CGGCTGATTT TTTGTATTTT
TGGTAGAGAT GGAGTTTCAC CATGGCTGGG CTGGTCTTGA ACTCCTGATC TCAGGTGATC TGCCCGCCTC AGGCTACCAG
AGTNCTGGGG TTACA

SEO ID NO:483: (Length of Sequence = 353 Nucleotides)

CTGGATAATC AGGCCATGT GCTTTAACAG GATGTAAAGG GGAAGCTCAT GATTAAACAT GGGAAATATG CAGCAAATTG
CAAGACCTGA GCTTAACCGC ATAATTAGAA CATAATTTIN CACTTCTTCC AGAGCATCAG CCAAGCAAAG GACTGAGAAA
TCTGCAACCC AATTGTCCTA AAAAGAAACT TAGGCTTCAC ATTTGTGACA TAATTTCTTT TAAAATGAAT ATAAAATTTT
ATTTTINATA TTTGTAGAGC ATAGGATGAT TGAAATCCAG TTGTTGTTTT ATCTGACCTC CATATCTAAT ATGGCTAGTG
CCGTTACTAC TCTACAGAAC GCGCAATAAG TCA

SEO ID NO:484: (Length of Sequence = 371 Nucleotides)

GACCCAGAAA ATGGAGCTAG CTACATTTCT CACACTTACT GTCATAATTA CATGITTATA TICTATTAGT TGTAATTATT
TTTCACCTAT CCTCTCATTA GAATGITATA CCTATAGAGC AGATACCATT CCAGTITTAA TITTTTGCCC CGACTCCTAG
TAAGTACGTG ACCTATTACA GGGAACTTAA AACAAACAAA AAGTCTGCTG AGTCTGGGAT GTTTTAAGGA TCGAAGGAAC
ATGTTGGTCC AATTTGCCTT CACAGAGGGT TACCTCTGCT TTTCTACCGA ATGTGGAATT GCTCCCATGT GGATTTTNAA
GGAATTCCAG TCTACCCTCA GGGGAAGGNC CACATGTAAT GCCAGAGGTC T

SEO ID NO:485: (Length of Sequence = 376 Nucleotides)

GGTCCGACGC TGTGTCAAGC TCTGCACCGG CCATGAGTAT GCAGCCAAGA TCATCAACAC CAAGAAGCTG TCAGCCAGAG ATCACCAGAA GCTGGAGAGA GAGGCTCGGN TCTGCCGCCT TCTGAAGCAT TCCAACATCG TGCGTCTCCA CGACAGCATC TCCGAGGAGG GCTTCCACTA CCTGGTCTTC GATCTGGTCA CTGGTGGGGA GCTCTTTGAA GACATTGTGG CGAGAGAGTA CTACAGCGAG GCTGATGCCA GTCACTGTAT CCAGCAGATC CTGGGAGGCC GTTCTCCATT GTAACCAAAT GGGGGTCGTC CACAGAGACC TCAAGCCGGA GAACCTGCTT CTNGCCAGCA AAGTNCAAAG GGGCTT

SEQ ID NO:486: (Length of Sequence = 396 Nucleotides)

TTGATATTIG TGICTAATTC CAGCTACTTT GAAAGCTAAG GCAAGGGGAT TACTGTATTA ATAAATTCTC ATGCTGTTAA
TAAAGACATA ACCAAGACTG GATAATTCAT AATGAAAAAG GTTAATGGCC TCACAGTTTC ACATGGCTGG GGAGGTCTCA
CAATTATTGG AGCAAACAAG AGACTTTGTT CAGGGGAATC TCCACTTATA AAACCATCAG ATCACGTGAG ACTTTTTTTGC
TATCATGAGA ACAGCATGGG AAAATCCCAC CCCCATGATT CAATTACCTC CCACAGGGTC CCTCCCAGGG ACATGTGGAG
ATTATTACAA TTCAAGATGA GATTTGGTTG GGGACAGAGA GGCCAAACCA TATCAATTAC TTAAGGCTAG GGGTTT

### SEO ID NO:487: (Length of Sequence = 375 Nucleotides)

TGATTAAAAT AATAGAGTIT AGTAATATGG ATGAATATAA GATAAATATI TAAAAAGCAG TIGIATTITI ATAGCCCAGC AAGATAAAAGT TCAAATATGT ATTITITATA AAGATGGATT TACAATAACA TCAAAAAATTA AAATGCACCT TGAAATAATA AAGACATGIA AACCCITITA TGAAGACAGA TTITITTAAAG CATTITTAAA AATACTITIT CATTGACAAA TAATTATCCN TATTINIGGG GTACACAGTA ATGITTCAAT ACATATAATA AATAGTGATC AGATCAGAAT AATCAGCTTA TCCATCATTT CAAACACTTA TCATTTCINT GTGTTAGGGG CCATTCAACA TCCTGCTTCT GGCTA

## SEO ID NO:488: (Length of Sequence = 323 Nucleotides)

CACTGCATTA ATGATTGENT TAACAGTATA TAAACAAGGG CCATGGTTT TITTACTAAA GTAGGTCTGA AAGATCAATA
TAAATACTAA TGGGGGCAGG GAGGAGTGTT TTATACCCCA AACTCCAATA TTCCAGCTCT GTGTCCTGTC CTATTATTAT
AATTTGTAAA AATCTTAACG ACGCAGTGAT TCGAGTTTTC GTAACTTCAA TGATGTGTTA GAGGACAATG CATCTTGGTT
TGAAGAATTT GCTGTATCCG AAGGCCGGAA AAGTACTCGA CCACGATGAT TAAATACATA AAAGGATGGG TGATTCCTTA
CCG

# SEQ ID NO:489: (Length of Sequence = 326 Nucleotides)

TIACCITITA CICIGATCAT AATCICCCAC CIGICIAAGA GGITATITAT TCCITATITA GAGGGCCICT ATIGCCATGI
GCCIGGAATT ATTATATGCT CATCACITTA TGAAGAATAA AATTIGICIT TCCIGCTITA AAGITACATT CGITCITCCG
CTCAAATCCT GATCIGGICC ATTAAAGAGI GITCGCAGAC AAAGITTCTG AAAGATTAGA GAAGAATCCC CCCCAAGATT
GCCCCAACAC TGAACTACAG ACAAACACTA TITTATITAA ATAAGGRGAC AGCITTCTAA AAGITATACAT TCCICTAATA
AAAATA

### SEO ID NO:490: (Length of Sequence = 186 Nucleotides)

CTCAGATCCA TCAAGATGTG AAACTCGCAA GTTTGGTGCA GAGAAGGTAC ATGGGTTTCC TTCTTTTCTC ATCTGTATTC
CCTTTTCTGC AATTATTTTC TTTGCCACAT ACTAGCCAGC AAACCAGGCA CCTTTGCCAG AGCCATTAAG CTACAAAAAT
ACTTAATATT TTAATTTGAA CTCTGC

SEO ID NO:491: (Length of Sequence = 347 Nucleotides)

CCTGTACTIG TCGTCCCTCA TICACTITAAT TATGATACTI GCCTGGCATC TTGCAGGTIT CTGATGCTGT TACCCCAGTA
TAGACCAAGT GCAGACAGAA TITCATTICT GCTTTATTAA GGCACAGTCT TGAGAAACCC ATTGGCTTCA CACACAATTA
ATTAATTINI GGCAACAAGC TACTATATTG GCTTGCATGT CACTTTCACC TCTCTGGGCA TTAGTTTNCT CTAATATTTA
TAAAAGAAGG ACATGACTIT CTAAGGTTCC TTGCAGTAAT TATGCAGTTC TATTCTAATA GATGCTTAAG CATAAAAACCC
ATTTTAATAC TGTCCCAAGG ATCCAGG

SEO ID NO:492: (Length of Sequence = 320 Nucleotides)

GAATTIGGNI CCAAAGITIG GACATTGCAT TICATTAATA CGICCCITAA GITTATITIA ATCIGIATIT TCCICCICCC
TITITGIGITC TITIGIAATCI CITITIGCIG TIGITITCGG TIAAAGAAAC CATGITITIT TCGICCIGIG AGIGCTCCT
GITCAGAATT TIACTGATIT CATCIGCIGG TATCATITAG CATGITGCIC TGICCGCCGI AGIACTITAA ACIAGACGIT
AGATCTAGAG ATGIGATCIA CITCGGIAGG ACITTGICAA GAATACTIGI AAGTAGGIAT TIAGGIACCA GGGCNCACAT

SEO ID NO:493: (Length of Sequence = 339 Nucleotides)

TECCAAGITT GCTGGAACAT TATCAGATGG CTTAGGGAAG ACGATGGACA ATCGGCATCA GTCAGAGCGG GAGTACATCA
GGTACCATGC AGCCACAAGT GGTGAACACC TTGTAGCCGG CATCCATGGC CTGGCTCATG GTATCATTGG TGGACTGACC
AGTGTTATAA CTTCGACAGT GGAAGGTGTG AAAACAGAAG GGGGTGTCAG CGGTTTCATA TCTGGCCTTG GAAAAGGGCT
TGTTGGCACT GTAACCAAGC CANTGGCAGG CGCCCTGGAT TTTGCATCAG AAACAGNCCA GGCGGTGAGA GACACAGNCA
CACTTCAGCG GCCCCAGGN

SEO ID NO:494: (Length of Sequence = 366 Nucleotides)

GTAGGCCTTT GGAAAGTAAT TAGGATTAGA TAAAATCATC AGGGTGGGGC CACCATAATG GGGCTGGTGG CTTTATAAGA
GGAAGAGAGA CCTGAGCTGA CACGCATGIN CTINCCCTCT TGCTATGTGG TGCCCTCAGC CATGTTAGGG CACAGCAAGA
AGGCCCTCAC CAGATATTGG GGTGGTCTIN GACCTCCCAC CCTCCAGAAC TGTAAGAAAT AGATTTTTTT ATATATTACC
CAGTCTATGA TATTCTGTTA CGGNAACAGN AAACAGACTA AGACAAGCTT CTTAAACAAA TTGANAATAG AGTTTTAAGA
TNCAGACTTT CATTGCCTTT AACAGGGGCC AAGAATATCT ATTTCA

SEQ ID NO:495: (Length of Sequence = 384 Nucleotides)

CGAGGAAGGC AAGAAGCGCA GGGGGTGGCC CGCNTGGCGT CGGTGGCCTC CGCTCCTGCT CGCAGCCCCT GTGGTCAGAG CTGGATACAA GATTCAAGAC CCTTCTNTTG CTTGTNACCC GCTCCAGGTT GGAGCCACAG ACACCCACCG CCACCCCGGC TGGGTCTGCN TCCTTTCCTG TGCCTTTCCC TCCAGAATGC GGCCTCAGAC CTAGAAGCTC AACCCCCCTA TGAGGGCCAC GTCCTGGGGT AGCTCCTGAC CTNCGACCTT ATGTCCAAAT TTCACACCCA TGGTTTTTCA TTTGACCCGG CCCCTTCTCG CTCATAATGA CAACNAGCTT CCTTTGAGAG GGATCAGAGN CCAATTGCAC AAGGAGGAGC CGCT

SEQ ID NO:496: (Length of Sequence = 342 Nucleotides)

TACCITAGIA AATGCAATIT TOGAACAGGC COCCATCTIC AACTGGTATA GCATCITCCA CACCCTGIAG CCTTCAAACA
TCACCTGTIA AAATACTGCC CATTCCATGT CATGTATATC TGCCCATTTA TGGGAGCAGT GAGTGGAACC CTGACAGTGA
CGGACTTTAA GCTGTACTIC AAAAATGTCG AGAGGGACCC GCATTTTATC CTTGATGTTC CCCTTGGAGT GATCAGCAGA
GTGGAGAAGA TTGTGAGCAC AGAGCCATGG AGACAATTCC TGTGGTATAG AGATAGTGTG CAAGGATATG AGGAACTTGC
GGCTTGCTTA TAAAACAGGA AG

GATTIATTAA GTATCCCCGA AAATATAAAC ACAAACCAGT AAAAAACAAA ACCGTAAAAC GTCAGGCCTG GAGCTGCAAT
AAGACAGAGA CAGGAGCAGC TCACACGTGG CCTAGGTGGG GAGGACGAGG CCATAAATAC TGCAGGAGGG CGCCAAGGGA
GCCCTAGGGC GAGGGGAAAG CAGGGTGTCG GCAGCGAGAT GCNTCCNGGG GTTTAGACAC TGCTGGCTTC GGNCCCGGCC
GGCACCANGA CTCTCACTTC CAGCTGCGAG CAG

SEO ID NO:498: (Length of Sequence = 319 Nucleotides)

SEO ID NO:499: (Length of Sequence = 408 Nucleotides)

GAGAAATACC TAATGIGAAT GACGAGTIGA TGGGTGCAGC ACACCAACAT GGCACATGTA TACCTATGTA ACAAACCTGC
ACATTGIGAC ATGIACTCTA GAACTTAAAG TATAATAATA AAAAAAGAGA ACCTITAAAA AAAAATAGAC TGCCAGATAG
ACTAATAAAT AAAAAAGAGA GGTTGAAATA ATCATAAATG ACTAAGGGGA TGTTACCCCA CAGAACTACA AAAAACAAAC
AAAAAAAACCT CAGAGACTAC TAAAAACACTC CTATGCACAC AAACTAGAAA ACCTAGAAGA AATGGGTAAA TTTCTGGAAA
CATACANCCA CCGAAGATTG AACCAGGGAG AGATTAAAGC CCTGAACAGA CTAATAATGG NGTTTCAAAA ATTGAATCAG
TAATAAAA

SEO ID NO:500: (Length of Sequence = 474 Nucleotides)

AAGTATAAGC GIAGITAGCA GCTTTTNCTA ATCACTCCTG TCCATTTAAA AAATAATCCT CATAGGAGTA TAAACAGAGG
AAGGAGAAAT GGAGGATGGG CTTAAGAGAA AGAGTATTTC ACAAATGTCT GCATAGCAAA TTCAATTCAT CTACCTAGTA
GCTCCTTCCG TGTTAACCTA CAGGTGTTCT CCCCTCCAAA AAAAAGCATC TTTTAGGAAG AAACCACCTT AACACTACCT
TTAGAACATT GAACTTCCAG GGATAGGTTG TTTGAGAGAA TCACCAAAAAG CCATTTTTAA ATGAATTTTT AAATTACGGC
TTTCTCATTC CTTATAATAG TGTAGCAGCC ACCTTCCCTC TACTATGGAA CTTTTAACCA ATAATCCAAG TCCT

SEO ID NO:501: (Length of Sequence = 378 Nucleotides)

SEO ID NO:502: (Length of Sequence = 448 Mucleotides)

TTTTGGAGAT GGAGTCTTGC TCTGTTGCCC AGGCTGGAGT TCAATGGCAC AAACTCGGCT CACTGCAACC TCCGCCTCCC AGGTTCAAGC AATTTTCCTG CCTCAGCCTC CCGAGTAGCT GGAATTACAG GCACACGCCA CCATGCCCAG CTAATTTTTG TATTTTAGTA GAGACGGGGG TTTCACCATG TTGGCCAGGC TGGTCTCAAA CTCCTGAACT CAGGTGATCC ACTCCCTCGG CCTCCCCAAAG GGTTGGGATT GCAGGCGTGA GCACCACGNC CAGCCATGAT CCTTAAACTT GTTTTAAGAG GTATAATAAC TGGAAATCAT GATGCTCTTT AAGGAATACC AATTGGATGT ATTATTGATG TATTTAATTC CATCCATATG NAGTAGAAAC AGTTTTCATT AGCAGAAGGC AATTATATTA TAGCTACACA ATATAAAG

SEO ID NO:503: (Length of Sequence = 446 Nucleotides)

CTACAGTACC CATCTCCATT TTCAGAGAGC TCCGATGGAA ATTTCTATGA ACTAATTCTC CTGCACATAC TTTGGTACAA GTGGGCTACT GGAGCCACCT TCCTTCGTTC AATCAAACAG CATTTATTCA GCTTATTTAA TGAACACTAT CCAAGATACT TGGGGGGACAG AAATGAAAAG ATGGGGGAGAC CTGTCAAACA TATGGTACTA TGTCTATGCA AAATAACATT GGAATGTAGA TTCACAGTGG AAGGCAGGGC AGGCATGGAA GAATTCTGAG AATGAGTGGG AGGCAGGGA AGGCAGGGAA AGTCAGCGC TGCGGGCAAA AGTCAGCCCG GCTGGAGGAA AGTGAGTTCC GGGATTTACA GAGCAGGTAG AGGCCATGCG GCCCAGCCCT CAAGCA

### SEO ID NO:504: (Length of Sequence = 248 Nucleotides)

TIGCICITCT TITICIACCAT GGGAACGICC TICTCAGGGG ATTITINAGGT CICGGIGITT CIGIGITICT NAATAGGCAG TITICICGCIG TCGGCTAAGG GCTTATCCAG GWCAATATCC AGAGCCCIGT AGGGCTCGIT GGGCTCTCT CIGIGGCAG AGCATTCICA GGCATCTCCT CIGINACGAT GTCCACCIGC TGGGCAAGGG CGATGICCTC GICGCTCTCC GTGGGCAA

### SEO ID NO:505: (Length of Sequence = 367 Nucleotides)

GCTATGTTGC CCAGGCTGTT CTCAAACCCT TGAGCTCAAG CAGTCCTCTC ACCTGTCTCC CAAAGINCTG GGATTACAGG
CATGAGCGAC TGTNCTGGGC TTACTAAATT TTAAAAGATT TGTGTTGAAC CATCTGCTGA TCATGGAGCA GCAGAGAAAT
TTATTGACAG ATTTTCTAGG GTCATCACTG ATGACAATCT GNTGCCAGAA CAAGCCTGTA ATGCTGATGA AACATCACTG
TTCTGGCATT ATTGCTCCAG AAAGATACTG ACTACAGCTG ATGCAAAAGGC CCCTGTAGGC AGTAAGGATG CCAAGGACAG
AATAACTGTT CTGGAATGTG CTAATAATGC AGCAGGCATT CAATAAG

## SEO ID NO:506: (Length of Sequence = 419 Nucleotides)

ACACCTGGTG ACTITAGCTA TGCCTATCAA AAGCCTGAGG AAACAACCAG GTCCCCAGAT GAAGAAGAT ATGACTATGA
GTCTTATGAG AAGACCACC GGACCTCAGA TGTGGGTGGC TATTACTATG AGAAGATAGA GAGAACCACA AAATCTCCAA
GTGACAGTGG CTACTCCTAT GAGACCATTG GGAAAACTAC CAAGACCCCT GAAGATGGTG ACTATTCCTA TGAAATTATT
GAGAAGACCA CACGGACCCC TGAAGAGGGT GGGTACTCAT ATGACATAAG TGAAAAGACC ACCAGCCCCC CCGAAGTGAG
TGGTTACAGC TATGAAAAGA CTGAGAGGTC TAGAAGGCTT CTGGGATGAC ATCAGCAATG GCTATGGATG GACTCTAAGG
ATGGTTGGCC ACACAACTT

## SEO ID NO:507: (Length of Sequence = 417 Nucleotides)

GAAAACIATT TIACITAAAA AATATICIAT TACITCAAIG TCATGICIGI TGAACGAGGA ACTCAACAIG CTIATITINCC TITIGGITCCA AGAAAAACCC AAGICTAACC AAATGIATGC CACAAGGAAC TGCCAACIGG GITAAAGCTI GGIATITITCC TGGITATCACC CCIATITCCT GGIGIAGGAC CTGGGGTTTA ATAGAGGACAT TTACATAAAA AAGGIATTTG GITAAAACAA GAAATATGCA TGCNCITCCT TACCACCTIC CTGGGAAAGA ACTGCTTTTT TINCITTCTT TCTGTGAATC TTGTTCAAGA CATCCTGTAG TTTAGATATA TGGGCTGCTT CTTTTTTACC CTCAAGCTTT TAGGTGACAC TTATAAAGGT GAGCATATCA TTCTATAAAA

### SEO ID NO:508: (Length of Sequence = 308 Nucleotides)

CIGITTAGAA AAAAAAGIGC AGCICACTGI CAGCACICAT IGAATITIGC AIAAACAIGC TITITGAGGC IGAAGCAAAT
CIGACIGATI TICAATGIGA AAATAAAATA TAAAANCIGI TITITAGAGII AITIATTAAC AGAACIAACA ICAGAATTAT
TIGAATCACC AGAATAATCA AITCIGGAAA AATCAGATIC AICAGATTAA ICITIGGCCA ACAACIGIIC AAGAACAATG
TIAACATCIG CAIGGCAAIG CIACATTINC IAGGATTIGA CAITITCAGC AATTGAGGAA ITACTATA

SEO ID NO:509: (Length of Sequence = 370 Nucleotides)

TTTTTGAGAC GGAGTITCAC TCTTGTTGCC CAGGCTGGAG TGCAATGGCA TGATCTCGGC TCACCGCAAC CTCCGCCTCC
CGGGTTCAAG CGATTCTCCT GCCTCAGCCT CCCAAGTAGC TGGGATTACA GGCACGCGCC ACCACGCCTG GCTGATTTTN
TATTTTTAGT AGACACGGGT TTTCACCATG TTGGTCAGGC TGGTCTCAAA CTCCCGACCT CAAGTAGTCT GCCTGCCTCA
ACCTCCCAAA GTGCTGGGAT TACAGGCGTG AGCACTTGCG CCTGGCCGTG ACTGATTTTT TTTCATGTAG AATTGTCAAC
ACGAGAGATC ACAAGTGGAG CACTTGAAA GACCGTCGGT TGTGTGCACG

## SEO ID NO:510: (Length of Sequence = 446 Nucleotides)

TCTTTCCTCT TACTTTCCTT CCTTCCCTCC TTTCATATGA GAGACTCTAT ATGGAAAAGG AAGCTGAAGT GGCCTGCACA
CGATATAGAA AAGCCATATT ACTTTCCTAA GACTGGTAAT CCGGCAATAC CTAATGCAGC ACATGGCTAG AGACTCCACA
TTTGCCCCAAC TTCTCTGCTC ATCATTTGCC ACTGTTCTGT AAATTTCCCA GTCCCCTCAC AGAAAGCACA TGGCACCATT
TAAAAATGGCT GCTCACTCTC TAAGGGAGGT CTCACAGGCT GGTAGTGAGC CCTGTCCCAA TAGTGAAGTT CTCCACAAAT
GGGGAGACTT CTCCCAGGAG GAGGGGAGGC CTGGAGATGG GCATGCAGTG GGCAATGTCA GCTGCCCTCC AGGTTCTTGC
TTGCCCTTTT TCCGCCCTGG GTCAGTATAC AAGCTTTCGG GGGACA

## SEO ID NO:511: (Length of Sequence = 354 Nucleotides)

### SEO ID NO:512: (Length of Sequence = 374 Nucleotides)

CATGIATATT ACAAAAAAGT TCCTGTACCA AAGTTCTTAT TAGACITTAT TITTGTTTTT TITAATTTTTA AAATTTTTTT
TGTTTTTATT TITATTTTTT AAATTINCTC TCCTCGTGGT GACTGTCATG TGATTGTCTC AGTTTCTCGA CCAAACAAAC
ACACTAATAA TTTTAAATCT GAAACAGTGA TTGTCCCTTT NGGCTCATGT ATGTACAGGG TGATCAGAAG TCGTACCTGT
TAGCAAAAGT GTCACGATGC TGCACCTCTA CCGAAACTGA TACCCACGAA CTACGGAATC TAAACAGACT ACACCCTGTA
ACTGCGTATT ACTGTCCACA ATGGGGATCT CCAAAGACAA AAGAGGTATG GAAA

# SEO ID NO:513: (Length of Sequence = 463 Nucleotides)

ATCAGCAGAT TTINCTCTGG TGAATGTCIA ATCAGTGTGA TTTCCATAGG CTATACTTAC CTTTTGGGGG CTACTTGCCA
ATNATGTTTG GTCAGTATCC TTGCAAACAA CAGAGTGACA GATTCTAAAA ATGACTTTGC AGGCCAGTAC TAAGAAAGAC
ACCAAGGTTC ATGGGCTTGC AAATAAAAAG TCCATAACTT CCCTGCCCTA CTTCACCAAG TGAAATCGAG TTCCTCACAC
TTCTGCACAC AGCTCTTCA GGATCTTCCC TTCCCTTCAA GGCTGTCTGA TGTTCAGTTT AATTTGATTG TATTTGTATA
AAGTGCTGAG TGTTGAGTCC TCAAAGAAAT TTACTTTCAG TCTAANGCCC CCTTGGGACA AGAAAGTGGC AACCAGGCAA
ATGATTGATT ACTTATTTGT TTGAGTATCA CTTTGTGATT GTCCCAGGGC TGTATTACAC ATA

## SEO ID NO:514: (Length of Sequence = 396 Nucleotides)

CCAACCCAGA AAACGITICC TGGCTCTCTA CTAACAGIAA AATGIGCTGA GCCCAAATTT TCTGCTCTAA CATGGGTCCC ACGGACCTAT CAGTCTGCTC TGGGGTGTG ACCTGCTGGG TCCTGAGCAG GGTCTTTCCC TAAGCATCAC TGTGGGTTTG GAGACAGCTG TAATGIGTGC AGCTGTCAGC AGAAAGTACA ATGCCACTGG GCTACATATG TCCATATCAT CCACCACCAT

TTCCCACTGT AAAACCAAAG GCTGCAACTG TGAACAAATG TGGACTTCCT CAAAGGACAA ATGAGGAGAC TGAAGGCTAC ATTTCCTCCT TTGAGAACCC ATTAGAGAGT GTCTACAGTT ATACAACAGG TTTCTGCAAG ACCCTGTGGG TAACTT

SEQ ID NO:515: (Length of Sequence = 416 Nucleotides)

ACAAAACAAA AAGTAGTAGC ATCTCTGTGA GAGGTACACA GTTAGAAAAA TGATTCCACA CACGAGTAAA GAGATTTACC
AGGAAGAGTC TTGTTTTCTA AAAGTTGATA CAACTAGTAG AAAAATACTT GTCAGTGGTA AATAGAGCAG AAGTAGAAAA
AGCAGTTAAT CTATTAGATC AGATCAGAGT GTAAGGCAGG TATATCAGGC CAAAGGTGAT AAGACAGAGC AGAAATAAAG
TATTGTTAAT TCATGCATTT NCTGACTCAT TTATTTATAC ATTGATACTG TCACTTATAA ATCAAATCTT ACAGGTCAGG
TTCTGTGCTA AGCTCAGGGG NTATAAAANG AAATANGTCA CTGCACTCGC CCTCACGGGG GCCCACCAGT ATAACTGGGT
AGATAGTTCT ATAAAG

SEO ID NO:516: (Length of Sequence = 368 Nucleotides)

CCCATGGAGC TCGAGAACAT CGTAGCGAAC ACGGTGCTAC TCAAGGCCCG GGAAGGTGGC GGTGGAAATC GCAAAGGCAA
AAGCAAGAAA TGGCGGCAGA TGCTCCAGTT CCCTCACATC AGCCAGTGCG AAGAGCTGCG GCTCAGCCTC GAGCGTGACT
ATCACAGCCT GTGCGAGCGG CANCCATTGG GCGCCTGCTG TTCCGAGAGT TCTNTGCCAC GAGGCCGGAG CTNAGCCGCT
GCGTCGCCTT CCTGGATGGG GTGGCCGAGT ATGAAGTGAC CCCGGATNAC AAGCGGAAGG CATGTGGGCG GCANTAACCG
CAGAATTTTC TNAGRCACAN GGGTCCTGAC CTCATCCCTG AGGTTCCC

SEQ ID NO:517: (Length of Sequence = 393 Nucleotides)

CCCAGCGCCT GEAGAGCCAG CCCTGCAGGG TGGGCTGGGC GAGCCAAACT GCGTTCCTGG TGCAGGGCTT CGGGTCTCCC
TAACAGACCT TATACGCTGA CCGGCGGCCG CCATGGCAGT GTCTCTTTGC TCAGACATCC AGGGACGACC ACATTCGTCC
AACAGCGGTC GCTCCACCAA TCCTGGGAGA AGCGAATCGT TTTCTCCGCG TGCCCTGTCA GCCGCTCATG GTGCCCAGAG
AGGAATTTTA GTGGCAGCAT TCCGGCTGTC ACGNCACCGA AATTNCCAGG CCACTCCAAG TCAGAAGGGA CCACCAGGAA
AAGTCAGGAA GAGAACCACC ATCAAGGTCC CAGGCTCTTT TTTTGTGACA AGGACTTAGA GGGGTTTGGG TCT

SEO ID NO:518: (Length of Sequence = 465 Nucleotides)

CCTTCTCTGC AGATAGAAGA GOCAGAATGG GAAAAGOGAA GATCCATCAA CCTGTCTGAG CTCATTGATG TITACAGTGA
TGGTGTTGAA CTACTCCAGA TGGTGAAGGC ACCAGATTCC AACTGCAGCA ACCTTCTGAT TACAACCAGA CAAAGCCTTG
TNCTGCTTCG GGGGCAAAAT CTGACACCTT ACTGGGCATT GAGACTTCAA GGCCTGCGCA GCAGCCTACT CCTGGATATT
TCACTGATGA TCAGACATTA GACTTCCTTC TGCAGATACA GGATGGAGTT GGGATGAAAA AGATGATGGT TGTGGATGGT
GACTCTGGGC TCCATTGTTT GGAGTTACCG TGCTCCGTTG TCACATGAAA GAAAACGGCC AGCCACCTCA GCAGTTACTT
TCAGACCAGA AGTCTGTCTT TCCTCTTCTG GGGCCGAAGG CTTGTCAGGT TGCATCTTCC CAATT

SEQ ID NO:519: (Length of Sequence = 382 Nucleotides)

GECCETCEGT AACAGAAAC TCAGTECATA CITTECTETT GITAGETTET CAATATAGTC TITTCTETAGG ATGGATAGCA
TGITTGAGAG GIGCCAAACA AGAACTITTG GEGTTAGTAG TGTGTCTTGT GGAGGGTATT ACAGGACTGT GTAATTATAG
GACTCTAACT TGACATGGCT TGGCACCCAC TTGCAGCTAG TGGGTACAGG GTACAAAAGA TGTTAGAGAA AAGCTCTACA
GATTACGTAC TTCTGTGTCT TCGTATGCTC AACACTGTCC TTTTGTCCTC CATGAAAGAT GAAGGAAGCA AATTTATGTA
TGINCTTTCT TTGACCTTCT TTAATCCTCT GATACTTTTT AGATTGCATG ATTTTACTAG GC

SEQ ID NO:520: (Length of Sequence = 304 Nucleotides)

CCAAGACTGC TGATCTCTAA ACAAGCATCA AAACCCGAAG CTCATTAACA TCAGAGTGAG CTTCAATAAG GTGANCACTA
CAATGATGTA CAATTACATC CTAATANITC ANTGCCCAAG AGCCCTGTAG AACTATTGCA AGGCCCAGGN TTATCACAGT
ATGCAAATGC ACTAGGAAAA TCATTACCTA TTTAGTCCCC TTTATTTTGG TGGGTTTAAC ATGAGAAGAG TAATCCATGC
TACAAGACGA GATTTCATTT TACAGCTGTA GTAGCCAAGT GCATAAAAGC TTGANTCTGT CCCA

SEQ ID NO:521: (Length of Sequence = 360 Nucleotides)

TTGAGACGGA GCTTTCCCTG TCACCCATGC TGGAGTGCAG TGGCGCTATC TCAGCTCACT ACAACCTCCA CCTCCCAGGT
CCAAGTGATT CTCCCGCCTC AGCCTCCCAA GCAGCTGGGA TTACAGGCGT GAGTCACCTG CCTCAGGCTC CCACAGTGCT
GGGATTACAG GTGTGAGCCA CTGCGCCAGG CCTCCCAAGG TGTTGGGATT ACAGGCGTGA GCACCGCTCC GGGCCTCCCA
CAGTGCTAGG ATTACAGGTG TCAGCTGCTG CACCTGGCAA TTTTTTTGATA TTAGGTCCCC TGAAGTCCAA AAAGAGATAT
ATGGCTTATT TGGTATAATG AAATCATACA GGAAGGCATT

<u>SEO ID NO:522:</u> (Length of Sequence = 287 Nucleotides)

TTGAGGAAGT TCTGTTGCTG GTGAGGAAAT TCTNTTGAGT TCTGTAGGAA TTTTTATAGC TTGTTTTGCA TTCAGTTCTA
TCAACAAGCC AGCAGCAACT CAAAGGGAAG CCTCCTNCTG GCATATCAAT CACACAGGCA CATAGGATCA TATAGCATAT
AGGATCAGTC CCAAGAAGAA CTATNGGGIN GGGGAGAGGT TTTTCTTCCA CTTCTTGGGN TTCAGTGACT TTGAGATGGA
CCTCTTTTTT CCNNTGGACA AAATGTCATC ACACCAACAT CTTATTG

<u>SEO ID NO:523:</u> (Length of Sequence = 318 Nucleotides)

CCTTGICTCT ACTAAAAATA CAAAAATTAG CCGGGCATGG TGICACGTGT CTGINATCCC AGCTACTCGG GAGGCTGAGG CAGAAAAATT GCTTGAACCT GGGAGGCAGA GGTTGCAGAC AGCTGAGATC ACTCCATTGC ACTCCAGCCT GGGCAACAAG AGCAAAACTT TGICTACAAG TCCTCCTAGG CTGACAGGTC CTCACTCACC TGAATCTITT ACGCCAGCAG CGTCTCTTCA CTGACGINCT TCINCATGCC GGAAATAGGA CCTTCCCTTG CCANCGGCCA GTGCTGGCTG CATGCAGTCG TTACTTTT

SEO ID NO:524: (Length of Sequence = 238 Nucleotides)

ATCICATIGE AGCCAGGGIT CCAGITCICA TGCAAGTCGG CCACAGGAGC CACGGAACCG CAGTAGGAIT TCTACIGITA
TACAGCCCTT GAGGCAGAAT GCAGCAGAAG TIGIOGACCT TACCGITGAT GAAGATGGIA AATIGAAGTA GIAACAGTAG
AAAATTATGA AAGGAGITIG ATAAAAGGAA ATCICITAAT ATGCTAGAAA CTCCTCCTGC TIACTGGIAA TATATTAT

SEQ ID NO:525: (Length of Sequence = 168 Nucleotides)

CCAATGAGIG TGGACCCTAA ATITAAACAG CIAAAGCTAT AGICTAAGGA CAGICTCAAA TAAATACCIT TGAATIGICA TATGGIGCCC AGGAGGGICT TGIGGAAAGG GITICATGGI AGIGAAAGAT GIAATANCIC TITITICCIT TTAACCCTAA GCCIGICC

SEQ ID NO:526: (Length of Sequence = 387 Nucleotides)

GGAGGTCACA CGGIGAAACA GACACAGTTA TATACAACAG GGCAGGTTT TAAAAAGAGT TGCTCTCAGA CGCATTITTC
CTGCTCCCTA AAAAGCCCGAG GAAGATACTG GNTCCACAGA AAGAAAAGGC AATGCCGTAA CATGAGGCCC TCATGGCCGC
ACCGTCCAGG GGAAGGGCTG TTAAAAACAC AAGTATTCTT GTGAAATACT TCGATCTGAG CATTAAGGCA GGTCTGCAGG
AGATCCGTCC TGGGGACTCG GACAGCAACG CTACCGGCTC CGAGAGGACA GTTAAATGTC GCCTCCCGGC AAGAGGGGCG
GAGAGATCAG ACAAGGAGTT GTTCCTGAGT TNAAACCTGC TACAACAGCA AACTCCAATA AACTCAA

SEQ ID NO:527: (Length of Sequence = 336 Nucleotides)

TTTGCAGTTT TACATTCCCC TAGTACATCC CTGCTTACTC GGGAGCACAA AGCTTGGTTG TAAGAAATTG TGATTTGGAA GTAGAGAAAA GCAAGGAAGT CCAACCTCAG GAGTGTCTCT GTTACTAAGA GGAGAGTGAG ATCCAGGGTG TGGGAGATGA TCTGAAGGTC TATGGTGGG GAGTGCCACA GGAAGAAGGG TTCTGGTCGG AGTTAAAGGA GGATATATCT ATATACTGGG AGATGAGCTG AATTCAGAAC ACATGGAATG GGAACAATTC TCCCCATACT GCGTTTAAGC CAAATTAGGC TGGCATCCCC CACCACGGCC AACTAA

SEO ID NO:528: (Length of Sequence = 482 Nucleotides)

TTITACTICIA GCGIGAGGAG GGGGCCTCCT AAGGAAAGTC ATGCTGGGTA AACTGIGCGA TGTTACAGAG CACATTGAGT
CTGTGGTCAT CGTGGTTCTT CTATCTTCAC TGTCACCTGT ATCCTGTTAC ACATACTCAG TTCCTAATTG TAAGCTCAAT
TTTGGTATTA GCAAAAGCAT CTGTCAGTTT TTCCTCAATT ACTCACACCT CTTCTTGCCT AAATAAAACA AAGAAACAAA
GAAAACAAGT GTGGTGTCAT TACACGTCTC GGGAGTTCCT CGTCACTGAC TTTATATATAT TANAANAAAG AATGCACATG
CGGGGCCACGT TCACAGATAG ACAGATTCAC CCGAAATTGA GGAATGAGGG GCCTTAAAGG CTGCCGANAA NCAAAATGGG
GTGGAAATTA GCAANCGTTG TTTTCCGGTC AATTNCCAAT TGTGCACTGG CTGCGGTTGAG ACAAGNCCAT CTTCCAATTT
CC

SEO ID NO:529: (Length of Sequence = 412 Nucleotides)

CTCTCAGACA GIATCCTCCT CGAAGCAGGA ATCCTAGTAA ATCTCATCTG CGGCATGCGA TTCCTAGTGC AGAGAGGGGA
CCTGGGTTAT TAGAAAGTCC TTCAATATTT AACTTCACTG CAGATCGATT AATTAATGGT GTCCGGAGTC CACAAACAAG
GCAAGCAGGT CAAACTAGAA CACGGATTCA AAACCCTTCA GCATATGCCA AGAGAGAGGC TGGGCCTGGG CGTGTGGAGC
CAGGCAGTCT CGAATCCTCT CCTGGTTTAG GGAGGGGAAG GAAGAATTCC TTTGGCTACC GGAAGAAAAG GGAGGAGAAG
TTTACAAGCA GCCAGACACA GTCTTNCAAC GNCACCAAAG CCTCCGTCGC CAAGCTTTCG AGCTGGGGGC TTTTCCAGCT
TTCCCTCCAT TA

SEO ID NO:530: (Length of Sequence = 301 Nucleotides)

ACTITITAT AATAGICATI TAAAGIGGGI GAGATAATAT CICATIGIGG TITINATIIG CATTICICIG ATGCTIAGIG GIGITGAGCA TITIGINCATA TAACINCIGG CCATTIGIAT GICITTITIT TITITITITIT TITITITITIGA GATGGAGICI CACTITGICA CCCAGGCIGG AGIGCAGIGG CGCAATCTIG GCTTACTGCA ACCICCACTI TCTGGGITCA AGIGATICIC CIGCCICAGC CICCCAAGIA GCIGGGATIA CAGGNGCCCA CCACCACGCC CAGCTAATIT T

SEO ID NO:531: (Length of Sequence = 312 Nucleotides)

CAGATGAGAC CAGGCCTTGA CAGTGGGGGC AAGTCCTACC AACCTGCACA GCACATCCAG CAGGACAACT GTGGCTCAGC AGGTGCCAAA TGGAGCCCAT GGGCAGAAGA TGCCCACAGC GTTCCAGATG TGTGTGGTCT GAGAGATAAA AGGACACAGA ACAAGATGAC TGTGCAAATA GCCAAGTGGT GGCAGAAGTT CTGCATTTCC AAGAGATGAT CCACTCAATA ATTTGACGAT ACTAGTTGGC CAACATGCTC AGAGAAAACA GACTTATCCA CATCTGGAGC CTCATTCTCT CTCAGGATCA TT

SEO ID NO:532: (Length of Sequence = 313 Nucleotides)

GCACAACTCT CGACCTITIGG GAGCAGCCAG GGAGGAGTCA CTGTCCCAGC CCCCTGGCCT AGGCACAAAG GGGTGGGAGA
GACAGCTGGG CCAATATGGT CTATTACCGC CTGAAACCCC GCCGAACCAC CCTTAACTCT GCCTTCAGGC ATATCCCCCC
ACGTCCATGT CCAGGAGCCC CCCTACTGTC CTGGTCATCT GTGGCCCGGG GAATAATGGA GGAGATGGTC TGGTCTGTGC
TCGACACCTC AAACTCTTTG TGAGTATGTG GGGAGGGGCT GTGGGGGAGG AGGCCGTNAG GGCTCTGGGA TCT

SEO ID NO:533: (Length of Sequence = 378 Nucleotides)

GTAATTCCAT GTGGCTGACT GGGTAACAGA TTTGAAGGGT ATCACAGACC TTCATGTTGT AGCTCATCGC AGTGTATTGT
TTGTTGCTTG TCTCTGTCTC CCGTTGTATT GCCATCCTCA AGGGCAAAGA CTGCATCTTT GTATTCCCAG CTCCTAGGCC
TGAGTCAGGC ACATAGTAGG AATTCAGAAA GTATGTTTTG GATGTAACAT TCCTCCTTTT TCCTGGACAA AATGGCCTTT
TGTCCCGGTGC ATTGTCCTTT CCATAGAGGA GGGGTTGGGG CAGGATTGIN AGATGACTGT GTTTGAATCT TCAGTTAGCT
AAGACAAGGA TACGTNTTTT CCATGGTGCA AATCTAAAGG GTTCTAGTGA GGTGGTTC

# SEO ID NO:534: (Length of Sequence = 374 Nucleotides)

TITITITITI GICCAAGGIT TATCAAATTA ATTGATTITG GGGGGCAAGA TAAAAATTIT NATITGATTA ACTITCICTA
TIGGITITIG TITICAATTI CATITATTIC TICTITTATC TITIATAATGI NCITACATCI GCITGGITIG GGCTGGGCAC
AGGGGCTCAT GCCTGTAATC CCAGTACTIT GGGAGGCCAA GGTGGGCAGA TCACTTGAGA CCAGGAGTITI GAGACCAGCC
TGGCCAACAT GGCGAAACCC CGTCTCTGCT AGAAATATAG AAATTGGCCA GGTGTGGTGG CCAGCACCTG TGATCCTAGC
TACTCGAGAG GCTGAGGCAG GAGAATGGCG TGAACCCGGG AGGGCAGACC TTGC

### SEO ID NO:535: (Length of Sequence = 433 Nucleotides)

TGCCGACTGA TICCAAGTCC CCAGGAGGGC TGTGAATGCT AATAGATATT TGGGGTTTAT CTACATGGAT AAATCAGAAT
TGTTAACATT ATTTATAAAG ATAATACTTA CATAATTTIN AAATTCACAA AGATTGTTTG GCTTAATGAT TICTAAATGT
ATGCAATATA ACATTAGGCG GCTTTTATTA ATTCTATTTA TGTAATGGAA AAGCTCAATT CAGCAAAAAAA CAGATCTGAT
GGGATTTGGT TATTCTCTAC CTGATCAGAA CAAAGCCTTA CTTTACATTC CTGACTACCG ATTGGCTGAG GGATTGTCTA
ATAGAATGGA GCTTTCTTTT GAGCGGTATC CATGTGTACA AAATTGGGCT GCTTTACCTG TGACCCACGG ATTGCTGGAG
GAGCTTG:AA ATGTAGTCAG CCGTTTCTTT TGG

## SEQ ID NO:536: (Length of Sequence = 438 Nucleotides)

GATGAATTAA GAGGGAAATT TATAAAGTAA AATCITTAGC GCIGITGATC AAAGAGTTCC AGGCCGGGG TGGIGGCTCA
TGCCIGIAAT CCCAGCACTT TGGGAGGCIG AGGIGGGCAG ATCACGAGGI CAGGAGATCA AGACCATCCI AACACGGTGA
AACCCCATCI CIACTAAAAA TACAAAAAAAT TAGCCGGGCA TGGIGGCAGG TGCCIGIAGI CCCAGCTATT TGGGAGGCTG
AGGCAGAAGA GGAATICCIG CAGCCCGGG GATCCACTAG TTCTAGAGCG GCCGCCACCG CGGITGGAGC TCCAGCTITT
TTGTTCCCTT TAGIGAGGGT TAATITCGAG CTTGGCGTAA ATCATGGGIC ATAGCTGTTT TCCIGIGIGA AATTGTTATC
CGMTCACAAT TCCACACAAC ATACGAGCCG GAAAGCAT

# SEQ ID NO:537: (Length of Sequence = 316 Nucleotides)

TAGTAGCACT AAAGCCCCGT TITGGTCACA CTCTCACCTA GGTGAGAACC TGACCAAAAA TGTGGAATTA TTAAACAAAA TGATGGGAAG CCAATGTNCT GAAACTGAGC TCTTGCACTA GGCCCCCACA GACCAAATTA AAATGGAGTC ACTAGTGCTA AATGCTTTGG AGTCAAACAG AAATGTTAAA GAAGATAGAT CCCAAAACAG AGCAGTGTTT TATTTTTTCTC CAGAAAACAG GAGATTCCAG CATAATAAGA AAGTCTCCTC TGTTGTAACC CTTACAAAAA AGTAACCTGA AGTAACCATT TTTTTT

## SEO ID NO:538: (Length of Sequence = 303 Nucleotides)

ATCITCATGG GCGICCTAAC TGTAACAAAA ACCCCACAAT TTGAACAGAA GAACAGAAGT ATCTGGITAC AGAAGTGCAT TCATACATTT CACAAATGTT TCAGTATCCT CTTCTCCCCG ACCCCAGCAT GAGCTTTAAT TGGATGTATT TATTCTTTCA CCAGCATGCC CATGAAGGAG CTAAGGAAAA CATTTACCAA GTCTGTTTCA AAATCTGTCC TTGGCATATC AAACTTTTTC TCTTCCTTTT TCATGCTTTT TTTTAAAAAA AAAAACAGGA GAAAGCGAAT AGAGAGGAAA GAG

SEO ID NO:539: (Length of Sequence = 362 Nucleotides)

CATGICATAG TGGCCIGCIC TCCIAACACA GCACAATITA GGGCATATIT TCATGATGGI CIATCACIGG ATIACAACAC
ATCICITCAT TAAAGICITG GGAAAGAGGC TICAACITIN CIGIGITGAG AAAACITCAC AGGIGIGIAA AGITIGATCA
GGGTIATATA TATATITNAT TACATATATI TNATITINAT TITTCATITT TITGCATACA TAGCAGGIGI ATATACITAT
GGGTIATATG AGATATITIG ATAAAGGCAT GCAATGIGIA ATAATCACAT CAGGGTAAAT GCAGTATCTA TCCATCACCC
CAAGCATTIA TCCTTIGIGI TACATACAGI CCAATTACAC TC

### SEO ID NO:540: (Length of Sequence = 416 Nucleotides)

CACCAGGGAG AACCAATACA ACAGAAAAAA AGCAGAGAAC AGCTATGTGT CCTGCCAGGT CTACCAAAGA TAGTCATCCA
AACATGAACA GATGAGAAGG CTGTTTTCA AGAAGGTGAA AGTGACAGAN TATTCAATGA ATCTGAACAC ATGAAGATAC
TGAGACACCA GTAGTTCAGC AATAAGTGGA GAGAAAACTA AGCAAATGAG AAACTTAGGA ACAATTATGC AGCAAAGAAC
AACTGGATAA GCTGAAAAGT GTTTAAAGAT GCTGCCGTAA ACACTAAGTA TCACAATCAA ATTCTGATTT GTAAAAATAG
AGGTATGGGA AGGGTACANG TATGTTTGTG GGGCAAAATG GTGAGGAGAG CTTAAACCCT CTTCTTCCTT AATGAGGAAT
TAAATAATCC CATTAA

### SEQ ID NO:541: (Length of Sequence = 341 Nucleotides)

GAAATACTIC CAGGCCITCG AAAGGCCATC CTITGGACAC AIGIAAAAAG CIGICITGIT GGCCCGITAT TCCCACIGAC CCGICTGAGT GATCACCCAG GAGCGCGGG GCAGCAAGCA GAGCTCACCG GATTIGGGAC AAGGATTITA AAGGCAGCTA CAAAGCTGAG CICITATTGC TGATGATAGT CTCTGITCAG CIGITTAAAA TGACTGICTG ACTCACCATG GIAATTITNC ACAAATTAAA AACACATTIT GGGTTGTGCA ACAGTGGTTC TCATCTTTCC AGGCAGGCAG ATTATTTTAA TGCTGTTTAT ACAGGGAATT GGGACTCTCG G

### SEQ ID NO:542: (Length of Sequence = 334 Nucleotides)

TIGITGITTC CIACCTIAAC CAATACCICC TGGAAAAAAG AGGIAITGGI ATAAAAATAA ACCATACCCA AACATTCCCA
CAACATGACC TIAATAAGCT GGIGCACAGI AGAITATGGC AGAGGAAAGA AAATGACIT TAGAATTAGA GAAACTTAGG
TTCAAATCTC AGCTCIGICA TGCTTTGGIT GACCTTCAGI AAGTCCCATT TNCTTCATCT GIAAAATGGG AATAACATCT
ACTCCACAGC ATCAITAGAA AGATTAAATA GIGGCTGGGC ATGGIGGCTC ATGNCTGTAA TCCCAGCACT TTTGGGGAGG
CTGAGGTGGG GCGG

## SEO ID NO:543: (Length of Sequence = 350 Nucleotides)

ATTIGITICC AATTGACAAC ACCICATTAA TIGIAAGCCC AGIGACACIG CITGCIGITT CAAGICACIT TIAAATIACA CACGIGCIAC TIAATCITAA AAGCAAAATT AAACATIGGA CIGGITIACA TITCAAGCIA CAATAIGGAA CCATIGIATT TIGGAGGAATG AGITTAATAT GCATTGIAAA ATAAAATTAG GGGGTACITT GCATTCACAG CGGCTTATGT AATTAGGTTC AGICAACTGT AATGTTCAG GITAATGTCT TCCATGGATG TATGCIGIGI AAATAGIGAA CTTACATATC CCTTAATACA TCIGAATTAT TACATAAATC CTTAATATTA

## SEQ ID NO:544: (Length of Sequence = 328 Nucleotides)

GGGAGACGAG AACTCTTGAG ATCCGGGGTC ACCTGTNAGT CGCTGGACCC AAGGGGGAAG CGTCTTGATT CCTGGAGGAA
ATCTCCGAAG TGATGTGTAA CCCTGTGTGT CGCCTGCACT TCGGCCGCAA CTGCCTTTGG TTCAGTCCCC TGTTCCTGTA
GGAGGGGGGG ATCATGTAAC AGTGGAGCAC ATCGCTCCCG GCTTGGACGC CTTTNACCTT TAAGTGTTCC TGATTTAGTT
TGGCTTTGGG TCTACCAAGA ATTCTAGTCA GTTAACTAGC TTTTTAAGCC AGGTTCCTGA ATTTGGTAGG CATGGACACT
CCCAGTAG

SEO ID NO:545: (Length of Sequence = 342 Nucleotides)

GGGCIATTAC CTCTGGGCAC TGGGAAAACT GGGAGACGGG ACAAGGGGTG ACCAATTTTT CAGTGTATGC CCTTTTCGAA GTGTTAAACT TTTTTTTTT TTTTTTTGAGA CAGGATCTCA CTCTGTTGCC CTGCTGGAGT GCAATGGTGA GATCGTAACT CACTAAAGCC TCAACTTCCT CGGCTCAAGC AATCCTCTCA CCTCAGCCTC CTGAGAAGCT GGGACTACAA GTNTGTGCCA CCATACCTGG NTAATTNITA AAGTTTTTGT AAAGATGGGG GTTTTCCGAT GTTGCCCAAG CTAGTCTCAA ACTNCTGGGC TCAAGTGATT TGCCCACCTT GG

# SEO ID NO:546: (Length of Sequence = 280 Nucleotides)

CTCGIAATGC CAGCATTITG GGAGGCTTGA GGCGGAGGN TCCCTTGAGC CGAGGAGTTC GAGATCAGCC TATGCAACAC AGTGAGACCC CTATNICIAT TINATTIAAA AAAAAAAAAA AAAGGGGGTC ACGITTACTG CCACCATCCC AGGCAGAAAG ATGAAGCCTA GAGCCTCCA CTGCTTCCIA GTGGGTCTTG GGTTGTAATT TGCTGTCTTG GGTATATTTT TTGGCAGAAA GCATCTGGCA TCAGGCACTG GTTCTCAAAG TCGGGCCCCC

### SEO ID NO:547: (Length of Sequence = 298 Nucleotides)

CTAAAGAGTT TCACATAGTG GCTCAGTCCA GCCTTGTGGG GATCTTGCCG GGGCCTGGGG CCGGTGGTCC GGGGCCTAGG
GGGATGCCTN ACCAACAGAG GCTCTNCAGG CTCTGAAGAT AAGCTGAGGG CAACAGTGGA CAGAGGGGGC TGAACTTGCC
TCAAGGAGGC TCTTATTCAA GAGCAAGTCT TGCTGGCTTC TNCTGAGGCT GGGGACCACG TGGCCCTTTG GCCAGCCAGG
ACCAGCAGCN CTNACCACCT GCTGAGGGGC AGTTTGGGTC AGGGGGGCNCA CATAGAGG

## SEO ID NO:548: (Length of Sequence = 311 No: eotides)

GAGACAGGGC TGITTCCTGC ACTACACTGG TCATCTGACC ACCTTTCTGC AATGCTAAGA AGGTATTCTT TGACCAAACA
GCAGTCCACA TACAAGTTTA AAAGGGCCC TGITTATGTA GGAACAACAC TGAGGTGGTG CGTAGCAGGT ACAAGACGCC
CAAATATTTC CAGTTTATCT TACGGCTGGA CTCCTATTCT CCCACACTGT TTCCTAAAGA AGGTCCACAT TATTTTGGTT
ACTAGCCTAG TTTAAGTGGA GATACTGTGG GCAACTTNAA AGAAATGACA TCAGGCACAC AGGCTGAGCT T

### SEO ID NO:549: (Length of Sequence = 387 Nucleotides)

# SEO ID NO:550: (Length of Sequence = 377 Nucleotides)

CACCCCCAAC TCTTCACCAA GTAGGGGCCC TGGCTTGCAA TTGCAGAAGA GCTTTCCCAT CCCTGGGTGA GCATACCTAC
TGGTAGTGGC TCCGTGATTC CCTGGGGAGG GGCTCCCAGA GGTAACCAAC CAACCCTGTG CTACTGCTAT GACCACAGTT
CTGCTTCTGC TGCCCTCAAA CTGGGGAAGA AACAAAGAGC CTGAGGGCTT TACTCACGCT TCTAGCACTA CGCAGTCACC
ATATAAAGAG GAGCCCAGTC TCTCTTCCTT GTGAACCCTT GACCCCCAAC TCTTCACCAA GTGGGGCCCC CAGCTTGGGC
CAGCAGCACA GTGGCCCCAA CCCCTAGGCT GAACATTCCA GTAGCAGCTG CTCCGCG

### SEO ID NO:551: (Length of Sequence = 320 Nucleotides)

GAGTITNIGG TGAGCCGAGA TCACGCCATT GCACTCCAGC CTGAGCAATC AGAACGGTCC GGCTCCTGTT GCTGAGGAAG CAGCTCTGGA TGACCTTCAT GATGAAATTT GCAGCCTCGC GCTCAGTCAT GTTGGGGCTA AACCTGTGCC TGGAGGAGAG 샇

GCTGTGTCAG GGCAGGGCCG TGCTGGCTCC CTGGCCCAGT GGGAGGAGGG TCTTCCATGG GGACGGACTT CAGCTGAGAG CCATGCCCTG GGAAATGTAC CTTTGGGGTC CACATGTTGG AAGATGGGGT GCTGTGAAAG CCACACC

SEO ID NO:552: (Length of Sequence = 334 Nucleotides)

ACAAACTGAC AAGAGAAAC AAAGAATTCT TTGGTGATCT GGACACGCTG ATGGGGCCTC TGACCCAGCA CAGCAGCATG
ACCAATCTTG TCCGCTACGT TCGCCAAGGA CTGINTTGGC TGGGCATCGA TGCCCACTTG TTGTAGTGGG TGTTCTCAGA
TCTCTAGCAT CACGACCCAT CACTCTACCT CTACCAGCGC ACTGATGGTC ACTGGTGGAA CTCCACTCAC TGGGGAACGT
TCTCTTTGGT TATGTTTGTT TTTATGCTTC TTTTGTTATC TGTAAAAAAC AGAAGTCATT GTAAGTTGAC ACTACAACTT
AAGGGCAGTG TACG

SEQ ID NO:553: (Length of Sequence = 371 Nucleotides)

GAAAAGGGGA AAAATCACAA TATGTGTTCT AGACAATATT GGTTTAGATT TTTTAAAGAT CTAAAATTCA ATTATGGAAA GCCAGCAGCC TGATCCAGTT ACTGTGACTA AAGCAATTGT CAGACCATCT CTAGTCAACC CCTTATGGGT TTTGCAATGT GATTACCCCCA ATTTTGGATC AGGAGGGGTC AAACAGAAAT ACAGCAATGT GATTAANCTG CTCCTTTGCA AACAATATGA AAAGGTTTGT NCTTTCAAAG TAGATTCTAA CAAATCGTCT GCTCACTGTG GGGTAGCAAA GNGAGAAAAG CAAATCTTTC TATTAGTCTC AAGCAAGTCT TCAGATTTAC ACACAATCTA ATGGAGGCAT C

SEO ID NO:554: (Length of Sequence = 331 Nucleotides)

TTATGACTIT TITCAATAAG GCTATTGTAT CAGCCTGINC TCTCGCTGCT AATAACGACA TACCCAAGAC TGGGTAATTT
ATAAAGGAAA GAGGTTTTAT GGACTCACAG TTCCACATGG CTGGGGAGGT CTCACAATCA TGGCGGAGG CAAAGGAGAA
GCAGAGTCAC ATCTTACATG GCAGTAGGCA AGAAGAGCAT GTGCAGGGGA ACTCCCCTTT ATAAAACCAT CAGATCTAGT
GAGATTTATT CACTATCAAT GAGAGGCAGC ATGGGAAAAA CCTGCCCCTC ATGATTCAAT TACTTCCCAT TAGGTCCCTN
CCACAATACA T

SEO ID NO:555: (Length of Sequence = 305 Nucleotides)

GCTGGGACTA CAGGCGCCCG CCACCACGCC CGGCTAATTT TITGTATTTT TAGTAGAGAT GGGTTTCAC CATGTTGGCC
AGGATGGTCT CGATTTCCTG ACCTCATGAT CTGCCCGCCT CGACCTCCCA AAGTGCTGGG ATTACAGGCG TGAGCACCGC
GCCCAGCCCA ACACATGGTA TITTCTGTCA TITTCATTTA GTCTTCTGGT TGCTGTGTGA TGGTCTCAGG CTTTATTTAC
ATTTCTCCGA TTACTAACAG ACTTGAACAT TTCAGCACAC TTTTTAGGTT ATTGAATAAC CCCTA

SEQ ID NO:556: (Length of Sequence = 318 Nucleotides)

CITITIGGI GATINCIAAG CICIGITTIN CITATCCTAT ATATATATGI GGITGGITTI NATITIAGGA TITIAAGGIT ATCCCIAATA AATTTTGAGA TGIGITCCAT AGCTAGCCTG TTGAGATCTI TINATATCAA AAGITAATAT CIGIGGATTI NIAATCATIC TITCIACATA TITIAACAAAG TCATTAGCAA AATATTGAAC AAAACCIGIT ATTCATATCC TTAGATACAG AACATCAATA TCCTGAGATA CAGTACATCA TCAAAATGIG GTCCCCAAAT GNGCAGCAAT TAGCATCATG TGGGAGCT

SEQ ID NO:557: (Length of Sequence = 349 Nucleotides)

GGAAGCAATG TGCTTCTTCT TAACAGAGAT ACTGCACTAT TCTCTATGTA TACTCACTTG ATGGCATGGT ACATGTCCTC
CAGGATGTCT TGCTCAAAGT CCTTGCCTCC ATTCACACCT TTCAGATTTT TGCGAAACTC CTAGAGACAG GCCAGTAAGT
TTTTTCCCCT TGTGTCAACA CTGAAGCCCC ACCTAAGGAA CTCTTGGGTT TTCAGTAAAT AGGACTTAGG AAAAGGTAAG
CGAAAAAAACC CACTTCCCCA CCCCAGTCCC TTTTCTAGGT TTGGGCCAGC CCTTCCTTGA TTCCCTTGGA CAGAACCCCA
TCCATCATGC CCACTGGAAT CCTATGTCC

SEQ ID NO:558: (Length of Sequence = 279 Nucleotides)

GOGCCAGGCG CTGTGGCTCA CGCCTGTAAT CCTAGCACTT TGGGAGGCCA AGGTGGGCAG ATCACCTGAG ATCAGGAGTT CAAGACCAGC CTGGCCATGT TGAAACCCCA TCTTTACTTG TAATACAAAA ATTAGCTGGG CGTGGTGGTG TGCGCCTATA ATCCCAGCTG CTTGGGAGGC TGAGACAGGA GAACCTCTTG AACCCGGGAG GCAGAGGTTN CAGTGAGCCA AGACTGCACC ACTGCATTCC AGCCTGGGGG ACAGAGTGAA ACTGTGTCT

SEQ ID NO:559: (Length of Sequence = 278 Nucleotides)

GAGAAAGCCA AGAGCCATCT GGAGGTGCCG CTGGAGGAGA ACGTGAACCG CCGCNTGCTG GAGGAGGGCA GCGTGGAGGC GCGCACCATC GAGGACGCCA TTGCAGTGCT CAGCGTGGCG GAGGAGGCGG CCGACCGGCA CCCAGAAAGA CGCATGCGGG CAGCCTTCAC AGCCTTTNAG GAAGCCCAGC TGCCGCGCT CAAACAAGAG AACCCCAACA TGCGGCTNTC GCAGCTGAAA CAGCTCTTCA AGAAGGAGTG GCTCCGCTCT CCTGACAA

SEO ID NO:560: (Length of Sequence = 304 Nucleotides)

CAAATGITAT TGGAAGITAT CTAGAAGGCT CAGTAACCAG AACITCCTT CATTCIGCTT TTCTTTTCT TTTTTTTTTT CTTCTGAGAC AGICTGGCTC TGTCTCCCAG GCTGGAGTGC AATGGTGTAA TCTCAGCTCA TTGCAACCTC TGCTGCCCGG GTTTGTGCAA TTCTCCTGCC TCAGCCTCCC GAGTAGCGGG ATTACAGGCA CGTGCCACCA CACCTGGCTA ATTTTTTTT TTTTTTTTTT TTGTATTTTT AGTAGAGCCG GGGTTTCAC CATGTTGGCC AGGCTAGTTT CAAA

SEO ID NO:561: (Length of Sequence = 323 Nucleotides)

GATGGTAAAC ATAAACCCAA ATATATCTGI AATTACATTA AGTGCAAGTG AACCAAAACA GITCAGATAA AAGACAGTAC CTATTTCATA GCATTATGAC TATCATGAGG TAATATATGT AGAGATTAGA GIACACATGT CATATTAGGA GGTGTGCAAT AAATGATACT TTATTCTGAA GATTAACATA ATTCATACTT AAAAGGATCA AGAACTAGAA TATTAAAAAA NITAGAATGTG AATGTTTCTG CAAGTTTTGA TAAGAACAAG CCCATAAATT AATCTCTAAT TTGCTACATT TAGGGAATAT GGGTAATGAC TAC

SEQ ID NO:562: (Length of Sequence = 214 Nucleotides)

TCTAATNAGG CCCIGCGIGC TGIGICATCC CATGGCGGAA GAAGGAAGGG CAAGAGIGGG TGAGATIGIN AGCACGAGAG AAGGCTGAAC TICATATIIT AACAACCCAC TITCATGATT ATNATAATCT TCGCATITAT TITTITCGGT CICITCATGI NCTCTAACTT TICICIGGGN TITTIGGTCIT TIGCTICTIC ATTITTAGAA GCTC

SEQ ID NO:563: (Length of Sequence = 358 Nucleotides)

TTTTTTTTTT GAGAACAGA AGCTGAATAT CCTGATTTGA TTTGCCACAC AGGGTTCAA TGGCTTAGCA GIGCTAAAGA
TTTATTTTTA TTTTTTGGG CTCTGGGCIG ACATTGGAAA TTTTNCTGAA TGAGAAAAAAC CATCCTCAAC CACIGITTTT
TAACACTGAG TAACTTTGGA AATTAACTTT TGCCACAGAC TTGAAAATGT TTCTTAATGA ATTTGACCTG AAATTACAAG
GTACAACAAC ATAATATGGT AAATTCATTT CAATAAAAAC TAAAACTTAA GATTGTCAAG CTGCTTTATA TACTTNCTGT
GCTATGAGAA GTCAAAACAG CGCTGTATTG CCAAATCC

SEO ID NO:564: (Length of Sequence = 405 Nucleotides)

ATGITACTIGIS TIGITICATAS ACATGITICS TITTAGTICITA AAATCIGGCT CATGGGGTAA ACACTATIAT AATCICCATC CICCAGATGA GGAAAGIGAG ACTTAGAGGT TAAGTACATT TITAGGATAAA GTAGGGTATT TCGATAAATG TITCAAATGT GITTCIGGTC TCIGAGGACT ACACTCCCAG GCIGCTGGGG ATACAAAATA CCCTITCTIT ACCATAGGAG CACTTGGGTA GAATATITGC AGAAACAATA AACTGCCIGA TATITAAAGT TCICTICAGC TCIGACATTC TATAATITCA TIGACCCTCT

TIGCATTIAA TIATGITGAT TITCCITTCT ACCCCITGCT TAGCTAAAAA TATACCCCIT CINIGTCCAT GGACAGGAGG ATGGG

SEO ID NO:565: (Length of Sequence = 196 Nucleotides)

CATCCACATC AGGCAAAGGC AAAGCAGGAC CTGAACTTCC CACCCCAAGC CCTACATCCA TGCAAGCCAG ACCAGACTGG
GTCAGAGGCT AGAAGGCAGC TCACAGGATT GCCTGGGGAA GCCTGGGCCC AAAACCTGGC CCTAGCTCCA GCCCAGAGAA
CCCACCTGGG CATNAGACTT GCGCCAGCGT AGGGGT

SEO ID NO:566: (Length of Sequence = 275 Nucleotides)

TIGGAAAAAA GAGAAAAAAA AATICIGCIT CATITACGAA TGITGCCAAA GGAGGCAAGT TITCAACIGA AAACAAAACA
TAAAGGICIA TGIGGATGCA GCCAAATGIT TCICCATITA GAAAATCATC ATAAAAGGIG GCAGCACTIT TITIGCITIGI
TAACIATATI ACTITATAACT GGCIGCACCA ACATITCATC TCAATITTIG GAGIGITTCI TCIGATCAAT CCTAAAAGCA
ACACAATCAT TITAGAGGIT GCAGACTACA ACAGC

SEQ ID NO:567: (Length of Sequence = 349 Nucleotides)

COCTOGINIG TOCCACACAA ATGITTAAGA AGICACIGCA ATGITACICCO CGGCTCTGAT GAAAAGAAGC CCCTGGCACA
AAAGATTCCA GIGCCCCTGA AGAGGCTCCC TICCTCCTGT GGGCTCTCCT AGAAAACCAG CGGGACGGCC TCCCTGCTGA
TACCGTCTAT AACCTTAGGG GGNCCTCGGG CAGGCAAACT CATCTCGGTG ATGGCTGTAG ATGCTAACAC TGGCCAATTC
AATGCCACAC CTACTGGTTA CCCTTTGAGG GCATTTCTCC AGACAGAAGC CCCTTGAAGC CTACGTAGGG CAGGATCAGA
GATACAACCC GTGTTTGTCT CGAAGGGCT

SEO ID NO:568: (Length of Sequence = 368 Nucleotides)

CIGGIAACIT CCCGATIGGN TITCCCCGCC TCANCCCTIT CCCAGGGCIA TICICCICCC ACCIGCIGCC AGGCCITICC
CIGGCCATCC TGIGITAAAT GICATCCCGC CCCTACTGIT ATGITCTCCA CAGCACTIGA ACAGGACCCA ACATGCCTIT
TCACTICAAG GITTATTCIT CTATTAGITT TCCCAGAGIC TGCTTCCCTA GIGICCATCT CCCCTGCTCG AATGCCTCIT
GAGAGCCAGI GCTIGIATIT TGGICCINGI GGIATGGGCC TGGCACATAG TAGGCAGTCA GCAGATATIT ATGGAACAAA
CAAATGAATT TGTGIGACTA TAGTTCATTG TTCATAGTIC ATTCATAG

SEO ID NO:569: (Length of Sequence = 328 Nucleotides)

TGTCACTTAA TGCACAGCTG GGGCTCAGGA CACAGCTTTG CACACCCTAA GINCTCAATA AATGCTAGCT CAGGGCAGAG
CTTTGCATAC CCTAAGTACT CAATAAATGC TAGCTCAGGG CAGAGCTTTG CATACCCTAA GIACTCAATA AATGCTAGCT
CAGGGCAGAG CTTTGCATAC CCTAAGTGCT CAATAAATGC TAGCTCAGGG CAGAGCTTTG CATACCCTAA GIGCTCAATA
AATGCTAGCT CAGGGCAGAG CTTTGCATAC CCTAAGTACT CAATAAATGC TAGCTCAGNG ACAGAGCTTT GCATACCCTA
AAGGTGCTC

SEO ID NO:570: (Length of Sequence = 313 Nucleotides)

CCCTAAAAGG CAGAGTGTCT TCTTACCTCC ACACAACCAC GCTAGCTCTA TAGCAGTGGT TCTTAACCAG ATTGAAATGG CTGAAATGAC AGACATATAT TTCAGAACCT GGATGGGAAG AAAGCTCAAT GAGATAGAGG AGAAGGTTGA AACGCATCCA AGTAAAGCAG TAAAATGATC CAAGAGTTGA AAGATGACTT AGCCATTTTA AGAAAGAACC AAACAGAACT TCTGGAAATA AAAAAAAAATC ACTACAGGAA TTTCATAATG CAATTGGAAG CATAAATAAC AAAATAAACC AATCTGAGGG AAA

SEO ID NO:571: (Length of Sequence = 338 Nucleotides)

AGGAAAGCAG GGGTCTCAAT TCTGTACGAA AGAGGAGGGT GTTTTACTTC CTGGAATTAT AGAGGCCAGA GGTGTCTCTT
TTTCAATTTA TTGGGAAGGT TTATTTTAAT ATGGACTTAG AAATAAATAA CTTATTAAAG TGAAGGTTCA CCTGGAGCCT
TAGGCTGGCT GCTAAGTGTG AGTCTGGGCT GTTGAAGGGA CTGTNCTGTT CTNCTGGGTC TCTGTAGGAG TTTGAAGGAG
AAGACTGGCC CCAAAGGGTG TTTGAACAGG TTAGATGTGC CCATTGGTTA GAACTTACTT GGATAGGGAG AAGGGVTCTA
GGGCGTATCC ACAAACTT

# SEO ID NO:572: (Length of Sequence = 375 Nucleotides)

CTATTICCAG AAGIGACAGC ACAAGICIGA GITGCIGITI GGICIGGIGA CCICAGACAC ACIAATITGA ATIGAAAGCI AAGAGIAAAA ATITNCIGGI TACAGGCGAG TCATACICITI GCAAGIAGIT AGCAAAGGGA GGCCCAAATI CICAAGGIIG TIGATGGGGA ACITGCCACT AAGAGAAGGC AGAGAGGICC CTAGTGGGTA TATTINCIGC CAAGCCACIT GCCAAAGAAG AGGAACCACA GAAAGAAGA CATCATGACC NGGAGAAAAA TGIGACTAGA CATGCTAACC TCCAGGINIT TATATATGAC TIGAGICIGC TGIAATIGGC AGCAGAAATC CAAAATITGI ATGGGTAGAC CACAA

# SEO ID NO:573: (Length of Sequence = 396 Nucleotides)

GAATCCCCAA AGGAGAGGAG CTAACCTATG ACTATCAGIT TGATTTINAG GACGATCAGC ACAAGATCCC CTGCCACTGT
GGAGCCTGGA ATTGTCGGAA ATGGATGAAC TAAGAAGCTT TGAGGCTACC AGGCAGGGGA GTCCCCCTAC CCACAANCTC
TTCCCTGGAAA GNAATNGAGG GGGAAGAGAG GTAGCAGCCA GAGCCAGGAC CCAGGGTTGG GGCTGCCGGC TGACCCGGAG
CCCCTGGAGC AGGAGGCTGG GGCAGAGGGC CCTAGGCCAA GCCCACCCTG GGCACCAGGG ACAATCCTCT TCCCCACCAC
CCGCCCTCAG GCTGGCATCT CTGCCCCCAG CTTCCAGGAG GGGCCAGACA GAAGCAGCCA TTTGGCATCT CAGGTT

# SEO ID NO:574: (Length of Sequence = 373 Nucleotides)

CTARACAGAT TIRACTCCCI CCCAGCARTC CAGATIRATI TARTATGCIT TCTTRACGGC ATTCCGCATT IMICATIRARA GCARATGRAC GICCATCCCT CTCTGATARA TIRAGGCCARA ARARTTCATA TGTTTRAGGC ATAGGGRAGG AGGAGTTGTT GGCTGTTARA ARARAGRACA ARARARAGTA CCGCARATGG CGTTTCRACAG TCTRGACATC TTCATCATCA ACACRARCAT TCCTCTTCAC ARAGGGACCT CRAGTARCCT TRAGGCTGGAG GACCCACCTG CGTRTGTTTT TMTTCTCATT CTTTCTTTRAC CTTCCCTCCA GGCCACCCCAA CCCACATTCA GTGGCCCCAAG TCACGTGGGG TTT

# SEO ID NO:575: (Length of Sequence = 431 Nucleotides)

GCCCCCATTA CCTTCTTTGC TGCTACCACA ACAGGIATA TTAGCCCTTG AAATTAAAGA TGTTGCTGTC CCAGTTGTGC
TTGTCTTCAC CTAAATGCAT ACAGTCATAT TCCAAAAGAC TATATATTAG TGATATCTAT ATAGTTCACC CTTCATATAC
ATGAGCTCCC GTGTGTGGAG TGAACTAATT GCAGATATAA AATATTTGGG AAAAAATTTC ATGTGTACTG AACATGTATA
GACTTTTTTN CTTGTTATCA TTTCCTAAAT AATACAGAAT AATAACCACT GTTTACATTAG CATTTACATT GTGTTAGGTA
TTATAAAATAA TCTGTACATA ATTTAAACTG TACAGGAGAA TATGGCATAA GNCATATGTG GATACCACAC CATTTTATAT
CAAGTACTTG AGGCCTCTGC AGATTGTGGT G

# SEO ID NO:576: (Length of Sequence = 410 Nucleotides)

GATGCAAACA GCCCCAAGGA GGGAGGTGGA AAGGCCAAGG GGCTTGCCCT CCTGCAAGGG CGCCTGTAAA CAAGTCCCCG
TGGGGTTTTG GGAGGTGCGC CCACATCTAA GACTGTGCGC CCTGCACTCC CTCTGGATGG CTTGCCGAAT TTGGTCTTCG
CTGATCACCA ATTCTGGAAG GGTGGAGAGA CAGTTGCCTG GACAGCTGCC TGATTCGGCC ATGACCCTTC ACGGTGTCT
GTGGGCCAAC ACCAAACGCC AGCCTGCTCT GCTGGCAGGG CTTCTACCTG CACAGTCCCT AGGGCTGCAA GAGCAAATGG
GGACCCTGGC TNCCGGTCCT TNCCAGGGCC TTGGTCAATG ACATCACCAC TTTCTTAGGA CAGCGTCTTG GGGAGCTACC
GGAACTTCG

3

SEO ID NO:577: (Length of Sequence = 405 Nucleotides)

GAATGAAAAT GCCATAITTG AACATAAACT TAGGGCAGAT TITTACTACT TITGAAAAAA TGITGGAAAA TATITCIGTA
TGAAACGIAA AACAACTITI AATTITTITI AGAAGITGAG AGGATTCIAT TITGCAAAGC TGIATTATGA AGCTAAAGAA
TATGATCTTG CTAAAAAGGA AGTACAAACT GIAACATGIA TICTTTTTTT AAAATCAATG CCTTINCICA TITNCITCTT
TGAAAATAGGI AAAAATATGI CCTTAGIAGI TCTTCCTAAG TGIATTCTGG AATAAGGGAT TTATCACTCA GACTGATGCT
AAGGACCAGC CTAGATTCCA TTGAGATTGA AACCGIAATT AGTGITTTCT GCATGCTGCT GCTTTATACC AAGGGCAAGA
AATTG

SEQ ID NO:578: (Length of Sequence = 406 Nucleotides)

CECTACAGGE GEGECCIEAG GCACTGCAGA AAGIGGECCT GAGCCTCGAG GATGACGGTG CTGCAGGAAC CCGTCCAGGC
TGCTATATGG CAAGCACTAA ACCACTATGC TTACCGAGAT GCGGTTTTCC TCGCAGAACG CCTTTATGCA GAAGTACACT
CAGAAGAAGC CTTGTTTTTA CTGGCAACCT GTTATTACCG CTCAGGAAAG GCATATAAAG CATATAGACT CTTGAAAAGGA
CACAGTTGTA CTACACCGCA ATGCAAATAC CTGCTTGCAA AATGTTGTGT TGATCTCAGC AAGCTTGCAG AAGGGGAACA
AATCTTATCT GGTGGAGTGT TTAATAAGCA GAAAAGCCAT GATGATATTG TTACTGAGTT TGGTGATTCA GCTTGCTTTA
CTCTTT

SEQ ID NO:579: (Length of Sequence = 374 Nucleotides)

GIGGGCCIGC TCTGGAGTCC ACATTCGTAA ATATTATGCT GCAGTAAATA TTAATCTTGA GAACTAGGTG ATATGGTTTG
GCTGTGGCCC ACTCAAATCT CATCTTGAAT TGTAGTTCCC ATAATCCCCA CATATCATGG GAGTAACCTG ATGGGAGGAA
ACTGAATCAT AGGGCAGTTA TTTCTATGCT GTCCTCATAA TAGTGAGTTT TCACTATATC TGCTGCTTTT ATAAGGGGCT
TTCCCCCCCIN CCTTTGCTCT GCATTTCTCT TTCCGGCCAT TATGAGAGGA AGGACATGTT TGCTTCCCCT TCTGCCATGA
TTGTAAGTTT CCTGAGGCCT CTTGAGCCAT GCTGAACTGT GGAATTTAAT TAAA

SEO ID NO:580: (Length of Sequence = 396 Nucleotides)

CAGAATAAAC ATTTACTATT AGGAGAGTCA AATCATTTAT TITCACATGA AAGAGATTAA GTAAAGCAGA ATCTTTGATG
GTCTGCTGTG AATTCTTCGC AGTGATTGAG AAATTTCTGA AAACCACTTC CAAATCAATT ATAATATTAA GTAAACTTTG
GCTTTAGGAG TAAGAGAGAG AAGGTCTGCG TCCATGTTGG GAAAGAATAG ATATGCCCCAC AATAATTAGT CTATTACTTG
TTTGAAAAGG GTGATTTCCT CGTCATTTCA AAGTATTAAG CAAATAAGGA CATATTGAGT ATGTAATTCA TGGAAAANTA
AGNAACTTCT TACAGTATGA TTCCTAAAGG ATTATGGATG CCATTATCCA TTTTGGAGTT GGTATTGAAG CTTATC

SEO ID NO:581: (Length of Sequence = 449 Nucleotides)

CIGCICCGIG GCIGITICAA AGACIGGGG AAAGGCIGIC CGGAGGGCAG ACCAGGIGCC TIGCCGCAGA GAAAACACCA
NAGICICCIG TICGCICATA AAGAAGITIT IGGGATGGGA GAGAATCCAG ACCATCITGG GGCAGCCANG CCCITGCCIT
CATTITIACA, GAGGIAGCAC AATIGATICC AACACAAAAC TCCITCCCCI TITIAAAATG ATTICIGITC TAATGCCATA
GATCAAAGGC CICAGAAACC ATIGIGIGIT TCCICCITIGA AGCAATGACA AGCACITIAC TITCACGGIG GITTITGITI
TINCTIATIG CIGIGGAACC TCTITIGGAG GACGITAAAG GCGIGITITA CITGITITIT TAAGAGIGIG TGATGIGIGI
TITIGIAGGAT TCTIGACAGT GCTGIAATAC AGACGGCAAT GCAATAGCC

SEO ID NO:582: (Length of Sequence = 261 Nucleotides)

CCAGCAGGIC GIACTICCAG IGGCAGGGIC CCGGACAGGG CCGCGTCAGI GIGCIGAGCI TGGIGGCGGG CACIGGCITG GACAGIGGCA IGACCCGAGG GAAGIGGCGG CGCGAGGGCC TCAGGGGGGCT GAGCACGICC ITGCAGAGGG GCGGAACGG GINCIGCIGG TAGTGGCCAA ANACCICGAA AACAATGGGC TNGCTCITGA TGTACAGGIG GCGITTATIT TCATGGATIT ATACACACIG GAAAAGCCTC T

## SEQ ID NO:583: (Length of Sequence = 399 Nucleotides)

CCCAGGCCAC CATTIAAAGC AGCCATTCCT GCCAAAGAGC CAACATIGAG GCCAGCCGTT GCTCCAGCTA ATGTCTGCAG
GGCTCCAAGT GAGGCTATGG GGTTGACAGA ATTACTGCTG CTAGAGCTAG GTGAGGACCC TGAACTAGTG AGCACGCTGA
GGGGACTGCT GGATGTAGTG AGAGCATTGG TACCACTTGG TGIGTTCTGA NNTGCACTAG CTGCAGCAGC TAGTGCAGCN
AAATTCTGTA ACTGCATTGC ATTCAACCCT CCCATTGGGT GGAGGCTGCT CAGGGTGTTG AGGTTCCCAG AGGAGGCAGT
CTGCTGAAGG AGTGCTAAAT ACTNGGGTCC AAGAGTATTT AGACCAGCAA GGTTTCCCCA CACAGATGCT GCGCTGATT

# SEO ID NO:584: (Length of Sequence = 441 Nucleotides)

GITGITTITA AGGATTAAAT GAGATATTAC ATGTAATGTG CTCATCCCAG TGCCCAGCAC ACAAGAAATG TTCAATAAAA
TAGGAGGCAT AATTGTCCTG TITGAATACT AGATAACCCT TITAATGGAT ATTCTACAAT TATGAATCTA AGGTGCTTTG
GAGGAGCCTA GGCAATCTAT TCCAAAAATTA AATGTAAGGA AGGTACATGA GTAAGGGATG GAGTAGGCCC TGGACCAACA
CTAGAGCTCC AAATTTCCTA AAAAGCTTGA GCTTCTTTTA CTGTGGCCAC GCCTATAATG GGAATAAATC TGGTTCTTCA
AACAGTCCCT CCCCTCTCTA AGCTCTGCTG GGGAGTAGAG ACATCAGCAG GCTGGTTCTG TGNTTAGCTC CTCCCCATCT
TNGACTCTCA TCCCATTCCC TCTTTCCTAC TACCCATTCA G

# SEO ID NO:585: (Length of Sequence = 326 Nucleotides)

GAAATGCAGG TICAGCTATT INCTGCTTGC AGAGTCCAGT TAACAAAAGT GAGINCTGGT ATAAAGAAAG TNATTITITIT
TITTTAAATT ATTCCAAAGC TAGCTGAGGG GAACAAGTAC AGGCTTCCTG CCTAGGGGTA TCACTITGCT TITGGAGCAG
GAAGTAAGCA CTITTAAAGG GGGCTTAACA TGAATGGCAC ATGGGGTCGG GGGAAGTAAG CAAGTGCAGC ATCTACATGT
TAGTTTGGTA CCTTATCTAC TAGGTAGTCA AGGTGGTGAC TGCCTGINIC TTTGTGGGGC ATGTGTACIT TGGGGTTGTA
AATTGG

# SEO ID NO:586: (Length of Sequence = 431 Mucleotides)

GAACGAAGGA AAAGCATCAA AACCTACAGA GAAATTNTTC AAGAAAAAGA GOGGAGAGA AGAGAGCTGC ATGAAGCATA
TAAGANCGCT CGGTCCCAGG AGGAGCAGA GGGGATCCTT CAACAGTACA TTGAGAGGTT CACCATCAGT GAGGCTGTTC
TCGAACGCTT GGAGATGCCA AAAATTCTGG AAAGAAGCCA TTCAACAGAG CCAAATTTAT CCTCCTTCCT GAATGACCCC
AATCCCATGA AATACCTGCG GCAACAGTCA CTGCCTCCAC CCAAATTCAC TGCCACTGTT GAAACCACCA TTGCTCGTGC
CAGINITCTG GGATACCAGC ATGTCAAGCA GGCAAGTGGG GTCINCAAGC AAAACTTGTC ACTTCCCAAA AGCAAGTGCC
TATGCTTGAC ANCCCAGGCC TTACTTCCCA G

# SEO ID NO:587: (Length of Sequence = 338 Mucleotides)

CTCAAGCAAT TCTCCCACCT CAGCCTCCCA AATAGCTGGG ATCACTGGCA CAAACCACCA TGCCCAGCTA ATTTTGTATT
TTTTGTAGAG ACAGGGTTC ACCATGINGC CCAGGCTGGT CTCAACCTCC TGGGCTCAAG CAATCCTCCT GCCTCGGCCT
CCCAAAGTGC TGGGATTACA GATGTGAGCC ACCGCATCCA GCCCCACACC CTCATTTATA CCAATTACCT GCCCAGTAAC
TGTGGACTTT TGCTTCCTCA CCCCTGCTCT GATCTGGAAG GAGAGGGATT ATGTTATAGC TTGTCAGCAC AGTCCCAAAG
TTCAATATTT CTGCGGGC

SEO ID NO:588: (Length of Sequence = 277 Nucleotides)

AAGAACATTI AAGIAGITCA TACAAAGAAA TATAAATTGI NCITAAATAT ATCAAAATAT ACTCACCICA TICATAGIAA
AAGAAATAAA AAACIGIGCI CIGATGACAT TITICATCIA TGAGAITTAC AAAGNICIAA AAATIGAGAA TATACATTIC
CIATIGCCIT TGGAIGGCAA TITIGGCAGIA ACIATCAAAA GIATAAATAT CIATACCCIT TGAGGIGICA ATCICATITIT
AAAGAATTIA TICTICAGCI AIGIACATAC AIGIACG

### SEQ ID NO:589: (Length of Sequence = 353 Nucleotides)

GIAATGAATT ATAAGAATCT GAATTGAGAG CIAAAATATC TGGGTTGIAG GCCTACTCTG CCACGNTTT NITATTTGCA
AATATTAGAG CTGAACTAGA TGACCTCAAA GGCTCTAACC AACTCCAAAA CCTACAATTC AATGGCTGAC TGATATACAT
TGIATACTCT TTAAAAACAA TTAAAATCAA AGANGNTAAT AAATGTGTCA TGIATTATAC AACTATTATA CACGTGTGTG
TGIATATATA TATATNININ CACAGAGAGG AAAGACATCT ATACATAGNC ATAACCATCA AATCAGTCAG AATTTCCATC
AGACACTTN CATTTCCCAG GTCCATCAGA TGG

### SEQ ID NO:590: (Length of Sequence = 364 Nucleotides)

CICATATACA TAAAAAGTGA TAAGAATCCG AAAAGACAGC CAGGGGAATT AAATGCCAGT TGGGGCCAAC GGGGCCCTGA
TCAOGGAAGA GGGCGCCCCC AGCTCTCAAT CTTCACACAA TCCCTGCACC CAGGGTCACA GAGCATGCGC AGGTCCTTCC
CGCCCACTTC CGGGGCAACT GCCAACCACC GCGCAGGCTG AGCCCCAGGC AGGAAGCAGC CCACTTGGTG GGGTTGGGGT
ATGAGTCCTT CCTCGCGGGG GCTCGGTGGG TCCTGAGTAT TCTTTGGCCG GATTTNCTGA TCCGTCTGCT CCAGGTGAGC
TNGGGAAGGC CCCAGGAAAA GGCCCANAAG GGCCTTTGCC AGGG

### SEQ ID NO:591: (Length of Sequence = 311 Nucleotides)

GAAAGGGGAA TAGGGAGTTA ACGITTAATC AATAGAGTTT GGGAAGATGA AAACGITCTA GAGATGAGTG GTGGTGATGC CACATAACAA TGTGAGGGTA CTTAATACCA CTGAACTGTA TGTTTAAAAT GGCAAAAAGG GTAAATTTTA TGTTATGTAT ATTTTACCAG AATTTTTTTT TTAAAGCTTA CTGCATGGGG ACCAAGCGTG GTGGCTCACA CCTGTAATCC CAGCACTTTG GGAGGCCNAG GCGGGGGT CACTTGAGGT CAGGAGTTCG AGACCAGCCT AGCCAACATG TTGAAACCCC G

## SEQ ID NO:592: (Length of Sequence = 358 Nucleotides)

ATTITIGETT CTACCCATCA TOCTOCTOC AAAGGAACCA GGGGTCCTTG GGGATTTGGC TGATGCCAGG GGATGGAGAG
TGTCAGTTGG NTCTGAAGGG GAGGCTCGCA GCATGTGTGT GGCAGGTCAG ACAGACCCAA GAGCCAGCTT GGTGGGGCAT
CCCTGGCTAC CCTGGGGACA CAGTGAGCGC CGAACTAAAT AACATCAGGA ATGCNTCACA ACGCAATGAG TAAGGGGAAT
CTGAGTCTAT AGGGATACAG ACCCAGAGGT AAATNGCCCAT GGCCACCCAC TTTCCTACAG GAGAATGTGA CTAGTTGAGC
GTAGGAACAT GGGAACAAAT GGTAGAGGTG GCTGACAT

### SEQ ID NO:593: (Length of Sequence = 354 Nucleotides)

GACAGACTGA AGGAATATAT GCAGCTTAAT TTAACATTIT TIGAAATTIT ATATTGCAGA AGITGIACAT ATTINCIGIT
GIGAAATTAG AAAGANITGA CAGGCAAGGA GGGIGGICTA CAAAGCACTC CATAGATCCA CCATACTGAG ACAATGCTTA
ATGCITIGAT GGATTTATIT ATTINATACT TICTATGCAT ATGCATGTAT TGTATAAATA CGNATGCATG GITAAATAGA
AATGGITCTC CITGGIGITC TGTITTATCCA TITATTGTIG TGAAGTAAAT CCCCAAAGAG GTAGGITTGC TTITGCCTGA
GGAGTCITTT GCTACATACT GGCTGTACAT AATG

SEQ ID NO:594: (Length of Sequence = 319 Nucleotides)

GAACATGGCC GTGAACTGCT CGGAGATGCG CTTGAACAGC TCCTGGATGG CCGTGCTGTT CCCGATGAAG GTGGAGGACA TCTTGAGGCC GCGGGGCGG ATGTCACACA CGGCCACCTT CACGTTGTTG GGGATCCACT CCACGAAGTA GCTGCTGTTC TTGCTCTGGA TGGCCAGCAT CTGCTCGTCC ACCTCCTTCA TGGACATGCG GCCCCGGAAC ACCGTGGCCA CCGTCAAGTA GCGGCCGTGG CGCGGTCGC AGGCGGCCAT CATGTTCTTG GCATCGAACA TCTGCTTGGG TGAGCTCGGG CACGGTCAA

# SEO ID NO:595: (Length of Sequence = 370 Nucleotides)

GAAGAATANA AAGAAAAATC CAAAATGAAG AGTATTATAC AAGACAACTA GTCAATAGTC TTCAAAGTGT CAAGGTCATG
AAAAATTGAG GAAGCATCCC AGACTGAAGG GGACTAAAGA AAAGTGACAA CTAAATGTAA TGGGTGATTC TGGATTAGAT
CCTGGAATTG AAAAAGAACA TTCATGGAAC AACTGACAAA TTTGAATAAG GTCTGTAGAT CAGTAACAGT ATTGCATCAG
TGTTAATCTC CTGGTTTAGA TCATGTCCTA ATGGAAATGT TTTGTACTAT TTTTTGTGGA CTCTTAAGGA ATGTGGGTGG
AGGACAGGA TGAGACCTAC TTGCATCGAC AACAAGGCGT TCTACGGACA

### SEO ID NO:596: (Length of Sequence = 335 Nucleotides)

CCACAGAGCC CCAACTCCCC CCACAGGAGC CAGCTCCCCC TCGAAGGCCT GGAGCAGCCG GCCTGTGACA CCTGAAGCCG
CCAGCTCGCC ACAGGGGCCA GGGAGCTGGA GATGGCCTCC AGCGTCAGTG CCAAGACTGA GCGGGCCCTC CAGTGTTGTC
CAAGGAAATG TAGAATCACT TTGTAGATAT GGAGATGAAG AAGACAAATC TTTATTATAA TATTGATCAG TTTTATGCCG
CATTGTTCGT GGCAGTAGAC CACATCTGTT CGTCTGCACA GCTGTGAGGC GATGCTGTTC CATCTGCACA TGAAGGACCC
CCCATACAAG CCTGT

# SEQ ID NO:597: (Length of Sequence = 336 Nucleotides)

CTCCTGAACA TCACAAACTT GGTTTCTACC TACCACACGA GTAGCCAAAA GAAAAGAAGC ACTAATAGAG AAAGGGGTGT CTCACACCAG ACAGAGGACC TCTGCTGTCA ATTAGATCCA GTATCATGAC CTAACTTTAA GTGTGGAAAA GAGTTCAGAT CTCTGAGACA CTGTGAAGAA ATGGATGGCT CATGTAACAT CTCTGATCCC TCAGTCCCCA ACCCTGGACG TGTTTCATTT ACAACATTCA TAGGAGTTAA CTTAGCAGTG TTGCAAGTTA AGGTTNCAAA CCAAATTATT TAATCAGTGT CCCCCCAATA AAATCACTTA TCCCATTTTA TTGCTAGTTT AGTTTT

# SEO ID NO:598: (Length of Sequence = 402 Nucleotides)

### SEO ID NO:599: (Length of Sequence = 369 Nucleotides)

CTCAACAAG TITIGATITI MICCACGATG ACTCCITGGG TGAATITITA ATCAAGITAT TICAACCATI TINCTCATAT
ATTITCGIGCA TCCCTATTCT GGTATTCAGT GAATACATGG GAGAGGTATG TNATICTCAG CTCCCACAGC CCATAAGTCG
GGGAACCAGG ACTTCATTCC CCTCTGCTCT AACTCAGACT GIGAGGTCAT TGAGGGCCAAG ACTGATGAAT TGITCCTCTT
CCTATCACTG GTGCCAAGCA CAGTAGITGG CATAAAGAAG TTACTCAATA AAGAGGGGGT GAATTTAATG AAAGACAGAG
GAAGGNGGGA CCTGGGGGAA GAGGTGGCCA TAAAGTGAAG GTACAAACA

SEQ ID NO:600: (Length of Sequence = 342 Nucleotides)

40

12.5

COGOCTOCTO GGTTCAAGCA ATTCTCCTGC CTCAGCCTCC CGAGTAGCTG GGACTACAGG CGTGCGCTCC ACCACCACGC CCGGCCTAATT TTTGTATTTT NAGTAAAGAT GGGGTTTCTC CATGTTGGCC AGGCTGGTCT TGAACTCCTG ACCTCAGGTC ATCCGCCCCGC CTCGGCCTCC CAAAGTGCTG GGATTACAGG CGTGAGCACN CGCACCCGGC CAGCTGCTTC TATTTTAATC TGAACTTGGA AACACCTTCC TACTTTAAGG CACAGGATCA GGGTAAGAAC CCACATGTAC GAGCTAACAG AGCTGCACTT CAAATTTACT TAAGTTAATT AA

### SEO ID NO:601: (Length of Sequence = 319 Nucleotides)

AGIACIATIC TGCCATAAAA AAAAGAATGA GATCCTATCA CTIGCAACAT CTIGGATGGA ACTGGAGGTC ATTATGTTAA GTGAAATAAG TCAGGCACAG AAAGAAAAAC TTIGCATATT CTCACTCATT TGTGAGAACT GAAAATTAAA ACAATTGANC TCACGGAAAT AGAGAGTATA ATGATGGTTT CCAGAGACTG GGAAAGGTAT TGGGTGGGGG GCAGGGAATG GGGAAGGTTA ATTAAGTACAA TGCAATGAAT ACGATCTNGT ATTTTACAGC ACAAAAGGGT GGCTATGGTC AACAATAATT TATAGTACA

#### SEQ ID NO:602: (Length of Sequence = 334 Nucleotides)

CACCCACAGA CIGCCAAGIG GGACAACITI CIGGCITTIG AAAGGCICCI TCITCAGAGC ATIGGGGAGI CAGCAATGIC
CGITGIGITA AATCAGCIGC TGCCCATGAT TAAGCCIGIA ACCCAGAGAA CCAACGAGGA CIACAGCCCI GAGGAACTGC
TGATCCTTCI CATATATATI TAINCIGICA CIGGAGAGCI CACGGIAGAC AAAGACCIGI GIGAAGCAGA AGAAAAAGIC
AAGAAAGCAT TGGCICAGGI CITCIGIGAG GAATCIGGAT TGICACCITI GCIGCAAAAA ATIACGGACI GGGGACTCIT
CAATTAATCI GACA

### SEQ ID NO:603: (Length of Sequence = 410 Nucleotides)

TITCACCATG TIAGCCAGGA TOGICTOGAT CITCTGACCT TGIGATCCGC CTGCCTCGGC CTCCCAAAGT GCITGTATTA

CAGGCGIGAG CANCCGCGCC CAGCCAGGAT TATTATTTIT TAAATCAGAG ACACTGAGTA CCACCTAAAG GGACTTAAAT

TATGCAATTG GAATGAAACT AAAGIGAATT GAACATTTAG TITCACTTAG ATTTTATTIT TCCTGCCAAC TGICATATGA,

GAGTTTGAGA GGGAGCCCAG ATTAGACTTA GAGAAAAATA AATAAATTAC ATTTTATCTG CACACATGAA TICTAGAGTG

AGTTAAATTT ACCACAGCGG GGCATATATA TGIATATATA TGATACCNIG TTTTTATATA GCTCCNIATA GTTTTAAAAG

CACTTTGTAC

# SEQ ID NO:604: (Length of Sequence = 399 Nucleotides)

TCTCTAAGCA AAAAGAAAAT GATGAAAGAA GCAAACTTGG AGCATCAGAA AGGAAGAAG AACATGATAA AATGAAAATA
TGAGCTCCTA TTATGAACAT CGFATTACCA TTCATTGIGA AACTTAATCG TATATTTATA TATAAGCATC CTTCAGAGAT
GCTGTGGGTT CAGTTTCAGA CCACTACAAT AAAGTGAATA TAGCAATAAA GCAACTCATA TGAATTTTTT GGFTTCTCAG
TGCATATAAA ATTAAACTTC ATGCTATACT GTAGTCATTT AAGCATGCAA TAGCATTATG TCTAAAAAANT GTACATACCT
TTATTTAAAA ACGCTTTTAT TGCTTAAAAAN AGGCTAAATG GCCCATCTGA GCCATCGGCT TTTTTCCTGG CAGAGGGGG

### SEQ ID NO:605: (Length of Sequence = 372 Nucleotides)

ATGCCTTAGA AATCCTACCA CCTCCCAGAA ATGATAGTTA TGGAAATTAA CATGGCATGT CAGATATGGT TCGCTGATGC
CTTGCTTTAG TTCTCAGAAA TAAGGCTTTA AAAGACTGGC ATGTTTCAGG ATTGCTGTCA GGAAATGATA ATTTAAAATA
CCCAAGAGTA CACTAAGAAT TATGGAAGCA TCTGTGAAAC TAATAAGCCA GTGGACATAC TGATTTTTAC CAATGTGTCT
ACATACTATA TTAAAAAACT TCCTACAAAG TATTGTCCCA ATTCAGTTCA TCTGAGGATG TGAAAACACT ACAGTGTACC
TTAAAACATC ACATTCACAA CCCTGACAGA CTGAAATAAA ATGAAATTAG GG

SEQ ID NO:606: (Length of Sequence = 399 Nucleotides)

TECCTTCCIT TCTTCAATTC GAGACAGCAG TATCATTAGT GTIGTATAGG TTATAATTAA ATCTAAGTAG TTCTTTGTTA
AATCAAAGIT TACAGTAATA TCAAAGAAGA CTTGGCAAAC GTCAATAGTA TTCAGCAATT CACAAACATG GTCCTTAAAT
TCCATAACAT CTACAAATGT GAAGTAATAT AATGCCAGAT TTINCAGAAT CTCTGATTTT CCTTTCTGTA GTTGTGCAAG
CTGTTGATTG TTGTTGCGGG TTTCTACAGC AGGGAATTTT CTGACTATGA ATTTCACAGC AGATTCCAGG NTTTTGTCGA
TAAGATAGGA TGGNTTGCC NIGGGGNCTC CACATGCCNT TCTTGATGTT GTAGAGGCGG GTGAGCATGC CGACGGCCC

## SEQ ID NO:607: (Length of Sequence = 412 Nucleotides)

CTGTACCCTT ATAAAGAGTG AAAGCCCTGC CCCCTTCTCC TATAGAACCC CTAGCAAGGA GACTGGAAGA NICAAAAACA
ATCCACCCAA AAAATGGCCT GCAGGGACAC AGTCCCAGAG AAAGAGACTA TGTACAACAA GGTACAGTAA GTAAGACCTG
CCCACACACAC GGACTTCCAA TCGACTTCTT AGTGCTTACT CCTACAGATG AACAGATCAA CCAGGGCCAC CAGATGCTCC
AGGAAAGACA GGAGTCCAAA AAGAAAATTC GGTAAGTTTG AATATATTTT GAGCAAATTT TCAGTTCTGT TGAAGTATTG
GGGGGACATT CAACAGTGAG TAGTAGTTTA GGGGGAACAG CTGGCACCTC TGGCAGTCGC CTCAGAGGTC AANCCAGCGT
NTAGGTTGCT TT

## SEQ ID NO:608: (Length of Sequence = 419 Nucleotides)

ATGAAGGCAG CTGAACTCTC CATCAAGTTT CTGCCTCCCC AACGTAATAT GGAAGTCGTT CTGCCTGTAG GACCCAGCT
GATTGGAATT GGAAAGCACA GTGCAGCTGC AGAGCTCTAT CTGAATCTGG ACCTTGTCAA GGAAGCAATC GATGCTTTCA
TCGAGGGTGA GGAGTGGAAC AAGGCGAAGG TTGTAGCTAA GGAGTTAGAT CCCAGGTATG AAGACTATGT GGACCAGCAT
TATTAAAGAGT TCCTCAAGAA TCAGGGCAAA GTGGACTCGC TGGTGGGTGT GGATGTGATA GCTGCTTTGG ACCTGTATGT
GGAGCAGGGC CAGTGGGGAC AAGTGCATTG AAACAGCTAC CAAGCAGAAC TACAAGATTC TGCACAAGTA TGTGGCTTTG
TATGCAACTC ACTTGATCC

#### SEO ID NO:609: (Length of Sequence = 337 Nucleotides)

GGTGGAAGIT GTAGTGAGCC GAGATCATGC CACTGCACTC CAGGTTGGGT GACAGAGAGA GGCTCCATCT CATAAAAAAA GAAAAAAAAA AGCATTTCTG AAAGGAATAA AAAACAAATT GATAACATCC CCTAATCTCT AGTTGTTGGG ATGTAGTATC CTTCATTTGA TCAGGAAATC ATATGATTGT CCTTAAATTA TTAAGTTGGC AGAATTTGTG TGGTTTCATA ATGATGCTTG TAAGATGATA TTNTAATGGA AATGTTTTAG ACTATATCTN TTGTNGTTTT TNCTGCTGTN TTTGTGTAAG GCTTAAANCT ACCCCCTTTA AAAACAG

# SEO ID NO:610: (Length of Sequence = 441 Nucleotides)

TAAGCCAGAG ACATTTCACT GIATTAATCT TGATACTAAT TACTAAGGCT TTTCTGTGGA CATTAAATTT GATCTGTTTA
ATTGCAAATA CAATAAAAGT CGTGATTTAT GCTTAATGIT TCTGCTAGGC TGATGACATT TTGAAAATGG CACTTATAGC
CTGGTTTGTC TTGGTTACAA CTTTTGTGGC TCCAGATGCT AAAAAAAATC TAATTGAGTA AGTAAATAAT GCAGCTAAGC
GTGCCTCTCT CGCTTCCGAA AAGTTTTTTC TACTCCTTTT TCTCCCTGGA GAGGCCCTGC TGCACACTGA TGCTGATCTA
AGGAAATGCC TTTGCTTCTT TGCCACTGAG CAATGTTAGA ATCACTAGGA GGGCAGGGCT ATCCCACTGG TCACTCTGTC
CCAGCATATC TACCATGAAG TCAGCAGGGA CTACAAACTC C

# SEO ID NO:611: (Length of Sequence = 344 Nucleotides)

GIACATATAT GIGIATATAT GIATATATCC CACATCTCCA ATTINCCTAT ACGIATATAC ACACATATAT GITATATAGG GIGIACAGAT ATAGGATATG TGTG

SEQ ID NO:612: (Length of Sequence = 384 Nucleotides)

TGATGACCAT AAGCCCATGC TITTCATAGA TGITTAAGGG TTAAATGAGG TAATGCATGI CGAGTGCTCA GCCAACTGAG
ATTCAGGAAG CGCTCAATAG ATGCTGCCTG TCATTATTAA CTGAGTAAGT AATCCTTTTC CCACAGAAGC AGTAGAAGGC
TGACGATGTG TGTGAAAAGG ATGGATACAA TTCCCTGGGC CACAAATAAA GGTTTTTTTG GTTGTTGTTG TTGTTTAAAT
GAACTGAAAT GAGTTTGAGA GATTACATATA TTATTTTACA ATACTTCTTA ATGCTAGTTT AAAAAGTTCA ACATTGTCAT
TCTACTCCAC TTCCGTATGA GATAAGTATA TGAGGGNGCT TAATTCCCCG MTAAACTAAG CAAG

SEQ ID NO:613: (Length of Sequence = 342 Nucleotides)

TATTIATITI TGIGGGIGIC GACITCCIAT GIGGGCITIT TGGGIGACAC TCCCITAAGG GITCAGITIG ACAATTCINA
GAGITGICCI GCAGITGGAG GCCACCAGAG GIATCIAAGC TCCCIGCITC CIATTINATA ATCCICCAGC CCCAGCAGGI
CCACTCCIGG TTCCIGIGIG TITGGCCCGG GCACAATCCC CACTGCTTIG CIAGACGIGC TITCIGCCAT GIGGCITIGG
GCCTAGAGCT TGITGATAAT TGCAGCTTGT GGCAGIGGAA ATATGGCTGA ATGAGCGICT AAACCCCTGG GINGGGGGIC
TNAANINCNN GGGTITTTAA AA

SEO ID NO:614: (Length of Sequence = 393 Nucleotides)

CAGIGITATI AACAATAGCC AGGAGGIGGA AGCCACCTAA ATGTCCATCA ACAGATGGAT GGATAAATGA AATGTGGTCT
ATACATACAA TGGAATATTA TTCAGCTTTA AAAAAGGAGC AAATCCTGCC ATGTGCTACA ACGTGGATGA ACCTTGAGGA
TGITTIGCTA AGTGACATAA GCCAGTCACA AAAAGACAAA CGCTGCATGA TTCCATTTAT ATGAGGAATC TAAAGTAGTC
AAACTCTTAG AAAGTAGAAT AGTGGTTAGC AGGGGTTAGG GGGAGGGGAA AAAGAAAAGT TACTGTTTAA TGGCTATAGA
GTTTCAGATA TGCAATACGN NAATTTCTGG GGGATTCTTT TGCACCACCA ATGTGCACCG TATAATTCCA CTT

SEQ ID NO:615: (Length of Sequence = 310 Nucleotides)

ATTATATACA TICCITTACT GATTITITAA AATTGIGICA ATATCITCAG IGAACICITA ACAATCIGGG GAACIGITIT
CCICAATTAC CACITCAGCA ACGITCATAC GAAATCAAGG CIIGCCITCA IGICAGIGIC AGGNICAACT ITAACICGAA
GGITTGIGIT IGICTCIAAC ATCITCAGAG IGAGCITTAG GGATGCCIGA AGGATGGACA GIACAAGCAA GCAGCIACIT
CCATGATACA GIGGGAAGAT AAAAAGGCCC ATTCAGICCA GCCGIGACCI GIAAATCCAG CIIGCCCICC

SEQ ID NO:616: (Length of Sequence = 266 Nucleotides)

GAGATGGAGT CTCGCTCTAT CACCCAGGCT GGAGTTCAGT GGCACGATCT CGACTCACTG CAAGCNCCGC CCCCAGGTT CACGCCATTN TCCTGCCTCA NCCTCTCGAG CAGCTGGGAC TACTGGTGCC CACCACCACT CCCAGCTAAT TTTTINTATT TTTGGTAGAG ACGGGGTTTC ACGGTGTTAG CCAGGATGGT CTCGATCTCC TGACCTCGTG ATCCACCCGC NTCGGGCTCC CAAAGTGCTG GGATTACGAG CGTAAG

SEQ ID NO:617: (Length of Sequence = 376 Nucleotides)

ATAATAATGA AAAGTGAAGG GTGGGGGTGC TGGCCACCTC CCATTTCTTT GCCTGGGTGG TGGTGACCAC GGCGCCCTTG
TGTCCTTTCC ATTGGTTACT GAGGACCATT GCCCTCATGG GCCCAGGCCA CAGGCACCCA CCTGTNAGCC TCACCTGCCA
CCTCTCTCCA TGTTGGCTIN TTGCCCCTGG GGCTGGCCTG GGCATGGGGG AGCTTATNTC CCCGACCAGG GGCTTGGCCA
TGTNTCCTTC ACAANCCCCA CTCCCGGGG ACTGAGCCTC CACTCTCTGC TGGGCTGAGG GCTCTGTGGT NGCCCAGGAG
CCCTCCCCAGC CACGTGCCAG CCCATCCCAT CATCAGCACT TGGTTTTAAG CTTCAA

SEO ID NO:618: (Length of Sequence = 352 Nucleotides)

GCCCATCCTG GCTAACACGG TGAACCCCGT CTCTACTAAA AATACAAAAA ATTAGCCAGG CGTGGTGGCG GGTGCCTGTA
GTCCCAGCTA CTTGGGAGGC TGAGGCAGGA GAATGGCATG AACCCGGGAG GTGGAGCTTG CAATGAGCCA AGACTGCGCC
ACTGCACTCC AGCATGGGCG ACGGAGCAAG ACTCTGTCTC AAAAAAAATAA TAATAATAAT AAAATAAAAA GTTTGTTAGT
ATTAGCAGAT ACATATTACT AGGTACCCCC CATGCTCAAT GAAGTGTTGG GNTACTCTNA AAAAGTGTCC AATCTTACAG
GTGTGACTTC CTCTGGAACT GCAAATTCTT TT

# SEQ ID NO:619: (Length of Sequence = 359 Nucleotides)

AAAAAAAACG ACCCCACAA GGGGGAAGGC CCCAAGTGGG CCCCTGCCTG TNGTNCTCTC TGGCTCCAGA GATGTCTGCA
TAGGCCTCAG CTTCTCACTG GCCAATCTCC TCTTCATGGG CACCAGCCAC TGCTAAACAT CCTTCCCTCA CTTCTTGTGT
AAGCTTGCTC CCCTGAGCCA CAGGTTGCAC ATCTAAACCT CAGCTCCAGG GAAAGGAAGA ACCAATGGAA GTGCCAGAGT
CCTGGGGCAA GCCAGAGCAT CACCTGTCAG CAAACCTCTG CTGGGCACTC TAAGCAAGCA CAGGACAAGN CCCAGAGTTT
AGTGTGTCCA GTATCCAGCA TGGRGACAGC ACATGCATT

# SEO ID NO:620: (Length of Sequence = 447 Nucleotides)

CTCTCTCAGC ACAGCTGGG GAGGGGGTCA TIGITCTCCT CGTCCATCAG GGATCTCAGA GGCTCAGAGA CTGCAAGCTG
CTTGCCCAAG TCACACAGCT AGTGAAGACC AGAGCAGTTT CATCTGGTTG TGACTCTAAG CTCAGTGGTC TCTCCACTAC
CCCACACCAG CCTTGGTGCC ACCAAAAGTG CTCCCCAAAA GGAAGGAGAA TGGCAGCCTC CACATCTCGG GTTCAAGTGA
TTATCCTGCC TCAGCCTCCA AGTAGCTGGG ATTGCAGCTG TGCACCACCA TGCCTGGGAT AATTTTTTTTA ATTTTTTTAAG
TAGGACACCG TTTCACCATG TTTGGCCAGG CTGGTCTTGG AACTTCTTGA GGTGTAAATG ATCTTNCCCC ACCTTNTGCC
TTCCCAAGTG CTTGGGATTT ACAAGGTTTT AAGCCACCCG AATCCAT

# SEO ID NO:621: (Length of Sequence = 237 Nucleotides)

CAATACCCCT GENTCCTGGG GCAGGTGTTC TGGGATCCTG GACAGGAGGG TCAGGTCGAT TTTAACCCAG AGAGACCTGA
TCTCATCACT GTCCTTTAGA GGGGAGAGA GTTCGTNCCG GCCAAAGGGG ACCAGTGTGT AGAACTGCTC CTCCAGCTCC
TTGGCGATGT CACTNGTGGT CCTGGCGTTN ATGGAGCCTA CAGGGGCCCCT AGGACCACTG CCCCCNTTGG CAGCGGC

# SEO ID NO:622: (Length of Sequence = 247 Nucleotides)

AGAAGGTCAA TAATAACAAA CTTCTTCAAG GTAAAGCAGG ATGTTOGAAA CCATTGCAAG GAAGCTAAAA ACCTTGAAAA AAGATTAGAA GAATGGCTAA CTAGAATAAA CAGTGTAGAG AAGACCTTAA ATGACCTGAT GGAGCTGAAA ACCATGGCAC GAGAACTACG TGATGCATGC ACAAGCTTCA ATAGACAATT CGATCAAGTG GAAGAAAGGG TATCAGTGAT TGAAGATCAA ATAAATG

### SEO ID NO:623: (Length of Sequence = 315 Nucleotides)

AATTTAGGIT TGITTTATIT AAGITTAATG TTAATTCCAT GCTGTGTTC AGTAAGANCA ATACAGATTC TGIATCTGTG
GCTCCAGTCA GATATCCAGT AGTACAAATN AGCTTCAAGT TACACATACT GANCAAAAGA GGTTGAGCGA GCGAAGGAGG
GCAAGGAGTGA GGGGAAGGAG GTAGGGGGA GGGGAAGGAG AAGAAACAAA AGANITGAAC AGGCATGCAG GCTTTTCCAT
ACCACCTTCA ACGCTAACCT GCTTCAGTGG GAGAGTAAAG TAGGCAAGAN TGAGCAGCCA CGGATTGTTG AACTG

## SEO ID NO:624: (Length of Sequence = 375 Nucleotides)

CCATGITGGC CAGGICICGA ACTOCIGGCA TCAGGIGATC CGCCCGITIC AGCCICCCAA AGIGCIGGGA TTACAGGCIT GAGCCACCAG GCCIGGCCCG TIACIAITGI TATTITITAAA IGCATTAGIA AAAAAAAAAA AAATITTAAT IGCIAGAACA

SEQ ID NO:625: (Length of Sequence = 305 Nucleotides)

GITCCIAGAT TACTCAAAIT TAGIACICIT CCATCITTIC TIGITGCIAT TCITTIAAAA TCACAAGAAG TCCATAACIT

AAGIAGGAAT TIGIATAAIG TAACITATIG TGAGIATAIT TCCTTACCAG CICATAAAGA ACIATGIAAA CITGAATGCA

TATTITINAC ATAAAAATAG CAAAAAAAAA AAAANCAAAA AAAAAACAGT ACTGGCCIAA TACIAGINGA NITACAGAAT

ANGGGIAAAT ANIACATGNN CATCCTTACA GAGIGAGCAT AAACAATACA TGGIAATAAT ATTTA

SEQ ID NO:626: (Length of Sequence = 300 Nucleotides)

AGCAATCACA TAAGGAAGGC ACCTCGAGTC TAGTAACACT GTGACTCTTG CGGTCTCTTA GAGGTACTTG GTGGTCTTGG

ATAAGATCTG GAAGAATTCT TTGGATTTCC AGACATAGGC TCTTGINCTC TTCCCCTTACT TTCTCCCAAA CAAATGGCAT

CTCTCTCTCT CTCTCTCTGT GCTGAGCTGC CTAGAACTGT GGGTGGGATC ACACAAGCAC CCTTNTGGCC ATTGCCCTTG

GGACTGTGCT AGGTCAGACC TGAAGTCAGC ACACCATTGG GTCTCACCCA ACACCTGTGG

SEQ ID NO:627: (Length of Sequence = 369 Nucleotides)

GAAAAAGAGA GAGGAGAGG AGTCAGGAGT GCTTTGGAAC TGGAGGTTTG CTTTCCACTG ACAACATCCA TATCTNCTGC

TAATGCCCAAC ATGCTCCCAA GTGTCTTAGT GGGTCCCACA AAGTTGATCC AGCCCAGAAG AGTTGCAGGA AACCAGAGGT GCTGCCCCACA TCCCCATCAC TCCCTTTCCC AACTTCCCAG CCTTGCCCCA AAAGCAGCAG CTCAGGACAA

CCTGAGATAC TACTGTNATG GGTCCCCGGG AGGAGGACAG CAGGAGTCTG AACTCCAGAG GAGGGGGAAT ATGGGTAAAA

CAGAGAGATG GCAAGGAGAC AAGCTGTNCC CAGACAGAGG GATGGGAGG

SEQ: ID NO:628: (Length of Sequence = 310 Nucleotides)

TITITITITI TGAGACAAGA GICTCACTCT ATCACCCAGG CIGGAGIGCA GIGACATAAT CATGGCTCAA TGCAGCCTCG
ACCICTCAGA CICAAGIGAT CCTCCCACCT CAACATCCCA AGIAGCTGGG ACTACAGGAG AGCCACCATG CCCAGCTAGT
TITINACTIT TCIGCAGAGA TGGIGITTCT CCATGITGCC CAGGICGGTC TCCGAACTCC GGGGCTCCAG CGATCCTCCT
GCCTCAGTCT CCCAGAGIGC TGGACCCACA GGCATGAGCC ACCACACTCA GCCCCAAAAT CCATGATTIT

SEO ID NO:629: (Length of Sequence = 443 Nucleotides)

CGCAGAGCAG AGGGIGGAAA GGCAAAGAGI ACAAGIGAGC GAGCCCITIT TGIGATGGCG TIGATCTGIT TACAAGGGGA

CTGCCTAAAC ACTITCCATT AGCCCCCACT TCCCAACACI GIIGCAGIGI TGCAGITAAG TITCCAACAC AIGAATGCIG

GGGGACACAT TIAAATIAGA GCAGIGATGA TCAGAAAGIT ATTGITGGGA AAGGAGGITC TATTITAACT TAAGIAGCTI

GAAAAAGCTC TICAAGGAGI TGATACAAGA ACIGAGATIT GAATIAGAGG ACCGAGIAAA GIGAAGAATC TGCGGGCAAA

GTCCCAGGCA GAGGGAAGAG CAGGAAATGA TTCATCAGIA GACTIGCTCI CCCATTCICG GCAAGGGCTA TTTCACATTI

TCTTCCACTC TCTTCCTCAG CACAICTCCA CCIGGGITTI CIC

SEQ ID NO:630: (Length of Sequence = 263 Nucleotides)
TGGATGTGGT GAAAAGCGAA CACTTATAGA CTGCTACTGG GAACGTAAGT NAGTACAACC TCTATGGAAA ACTGTATGGA
GATTTTTTAA AGAACTAAAA GTATATCTAC CATTTGATCC AGCAATCCCA CTGCTGGGTA TCTACTCAAA GGAAAATAAG

TCATTACATC AAAAACACAC CTGCACACAT ATNITTATTG CAACACAATT CACAATTGTA AAGATATOGA ACCAACCTAA GTGCCCATCA ACCCAATGTA GGG

SEQ ID NO:631: (Length of Sequence = 221 Nucleotides)

AATTINACA TATCAGIAAT TGITTTTATA ATTIGIGGIT TINATGAAAC ATTIGCTATGC ATTIATTAGG AAAAACTGAA
TTICCCAACA GGIGAACTGA AAAGNIATIT TAACTATTAT ACATAATCAA GATCCTGCCT CTACGGAATT AGCTAAACCT
AAAAATGITT GCATTAATGN ATAAATTCTT CCNGCATTCC TTGGGCCNGN TCTGGAGGTG G

SEO ID NO:632: (Length of Sequence = 344 Nucleotides)

TGTGATGGAG ACAAATACIT CAGTATTGGG ACCCATGGGA GGTGGTCTCA CCCTTACCAC AGGACTAAAT CCAAGCTTGC
CAACTTCTCA ATCTTTGTNC CCTTCTGCTA GCAAAGGATT GCTACCCATG TNTCATCACC AGCACTTACA TTCCTTCCCT
GCAGCTACTC AAAGTAGTTT CCCCACCAAAC ATCAGCAATC CTCCTTCAGG CCTGCTTATT GGGGTTCAGC CTCCTCCGGN
TCCCCCAACTT TTGGTTTCAG AATCCAGCCA GAGGACAGAC CTCAGTACCA CAGTAGCCAC TCCATCCTCT GGACTCAAGA
AAAGACCCAT ATCTCGTCTA CAGA

SEO ID NO:633: (Length of Sequence = 378 Nucleotides)

GGTCAGACCT GAAGCCGCA CAGCGCTGTG ACTGCCCAAG ACCCCCACTG TAACAACAAC CCAGCTGCCA CCTATTTCAC
TCAAGGCCCC AGGGCTCTCC AATTAGCAGG TAGTGAAGCC AGCCAGGCTT CTNTCCTTCC CTTCAGTGCA GTAAGCTCCC
CTGGTCCCTA GATGCATTCA AAGGTGCTGT CTGAGAGCCA GGGCTCTCAG TCATAAACCT TATAAATCTA CCTGGNGTTC
TGTTCTACCA TCGCTGAGCT GGCACTGAAT CCACCCGGCA AATCCCTTCC CACTNTCCCC TCCCCTCTTN CCCAGGCAGG
GTAGTCTGTT NCCACCTACG ACGTCATCAC AGTCTCATGC GGGATTACTG CCAGCTTC

SEO ID NO:634: (Length of Sequence = 28 Nucleotides)

ATCAGTGGTC TACCACAGNT TAAGTAACGG GTCATATT: G GAGTATCACA CATCTCAGTC TTGTAGAAAT TAGGNACAGC
AATTAGGAGT CATGCACATA TANGAGATGT AATCCCACCC TTTGACTATA GCCTACTCTT GTNTTTTACA GAAAAGACTG
TGGNGGAAGA AAACCCTTTA CCCINTINIT CAGGGAGAAA CTNACANCAC TCANCTGCCT GGCACTGAAA ATNITGGCATC
CAGTCCACTT TACCATCAGT GTTTAAGGAA ACCATCTCTG GTAAGC

SEO ID NO:635: (Length of Sequence = 226 Nucleotides)

TTGGGATGAT GCTTTTATTA AACGGAAGCG TCCAAAAAGG TCTGAGTCAA TGGTGGAGAG GGCAGTCAGC CCTGTGGCAT
TTCAGGGCTC CCCACCGATA GINATCGGCA GTGCTNACTG CAATGTGATA GAGATAGATG ATACCCTCGA CGACTCCGAT
GAAGGATGTG ATCCTGGTGG AGTCTCAGGA CCCTCCACTT CCATCCTGGG NGTGCCCCTC CCCTCA

SEQ ID NO:636: (Length of Sequence = 367 Nucleotides)

AACGCAATAA AAAGACAAAT TCCAAAATGG GCAAAAGATC TGAATAAACA TTTCTCCAAA GATATGCAAA CAGCCAATAA
ATACATGAAA AGATGGCCAA CATCATTCAT TATGCATTGC AGAAATGTAA GTCAAAACCA CAATGACATA CCACGTTGCT
CCCACTAGGA TAGCTACAAT CAACAAAATG GACAGCAAAA AGTGTTGGTG AGGAGTAGAG AAATCTGAAC CCTCATGTAT
TGCTAATGGA AACACAAAAT GATGGAGCTA CCATGAAAAA CTGCTTATCA GTTTGACCTC GGGAAGTTAA ACACAGAAGT
ACCACATGAT CCAGCAATTC CACTCCTAGG TATATACCCC AAGGACT

SEO ID NO:637: (Length of Sequence = 384 Nucleotides)

TICATAAAAA TITTACTIAA AATCIGIAAC GCIAGATATT GACTATCCTT AGTIGAGICA CIGAGGITTA AACACAATGG
TAAGICITAA AGTCIGCTAT TIACAGAGCA TIGAATCIGT ACCAATTIGC AATAGAAAGC CITCAGTATG CAAGAAGTIT
GCATGGGIAT TAAGAACACA GCCIAAATAA GGCATITGAT CIAATCIGCA GGAAGAATTT TCTTCCCCCAA AACAGAATTA
TAAAAGCITA CITTAAACAG GAGGCAGAAT AATTCTTTTA GGAAACCATT TCATTCIGTT TCTACTAACC TATACCATCT
GAGGAATTCT AGGGAGGATA ATAAAANICT CGIGTATTCC ACAGCAAACT TACATACCCT AAAG

SEO ID NO:638: (Length of Sequence = 409 Nucleotides)

GAAATTTTC ATCAGCTCTT GITTCCTCTC ATTCTTTTG ACCITGIAGA TITATCCTTT TITCTTAATT TATTCTCACT
TAATGGGATT TCAGGAGCAT ATTGACTAAG TITTCATTTT TACATGTATA CTGGGGAGTA TGACATAGAC ATCTCTGTAC
TTAGATATTA CTGATGTAAG TCTACTTTGA ATCAAATGAA CAGATGTTTA AAAAGTATTG TNCCCAATTG TTTTAATGAT
TTCINCCTGT GAGITGGGGT GGTGCTGCCC ATCACCAACT CAGGACGGGT ATTTGAAAAT ACCTGGGNNA AATTGTAACA
ATGTCTGGGA AAACACTGCA GGATATTTTA ATTGGGCAGA GGGGTCAAGG GGATGGATTA ACCATTGCGG AAATGTGAGG
GACGGGTCC

SEQ ID NO:639: (Length of Sequence = 197 Nucleotides)

GGITCIACIC ACGCCICAAG AGCATGGCIC AGGAGGAGAI CCGCAGAGAG ATGGACAAGA TNATCGAGGA CCTGGAGCIC TCCAACAAAC GGCACTCACI GGTGCAGACA TTGTCGGGIG GCATGAAGCG CAAGTGTACC GTGGCCATCG CCTTCGTGGG CGGCTCTCGC GCCATCATCC TGGACGAGCC CACGGCG

SEO ID NO:640: (Length of Sequence = 398 Nucleotides)

GAGAAGGAGI TICGCICITG TCACCCAGGC TGGAGIGCAA TGGIGCGGCC TCGGCICACT GCAACCTCIG CCICCCCCGG
GITCAAGGGA TICTCCIGCC TCAGCCICCI GAGGAGCIGG GATTACAGGC ACCCGCCACA CACCCAGCIA AITITCIAIT
TCCAGIAGAG ATGGGGITTC ACCATGITGG CCAGGCIGGI TITGAACTCC TGACCTCAGI TGATCIGCCT GCCTCGGCCT
CCCAAAGIGC TGGGATTACA GGCGIGAGCC ATTGGCACAC AGCCTTATCT GCATTITCAA ACGGGCCAGI ATGGATGGGI
TTTACACTIA TACINGAAAG GICATCCITT TNAAAAAANG AACCITTAAA ACCATTAACT ATATATAAAA ACTATATT

SEO ID NO:641: (Length of Sequence = 402 Nucleotides)

ATAATTTINA GCAAAATGAT ACAAAACTNI NITAACCAAG TAGAAGATTG GTAGITACAG TOGAATCGIC AGGGAGTACA
GGGCGGCCAC CACTGGAGGG AGCTGAGGCC CIGGAAAAGG AGTCTGATTC TNIGCAATTC TCTCTCTGCT TTINITCCCA
GCCCCGTTAC AACCGAGTTC ACGTGGGGGG CCGCAGTGCA GCCCCAGCCG TGGCAGCTCT TGGAGTCTGI CCGTTTAGTA
TGTTTCCCCC ACGAGCGTCG CTGGGTGAGT GGCCTGGAGA GCTCCCGGTG TTAACATTTC GATCCTAGAC CGGGGGGACG
TGTCACTAGG TAAAGGCCAT TGGGTAACCA GAGTAGATCA GGCCATGGCA TTTGTCTGGC CCCTTTCACA GCAATTAAGG
GG

SEQ ID NO:642: (Length of Sequence = 395 Nucleotides)

SEO ID NO:643: (Length of Sequence = 325 Nucleotides)

GGTATCTIAA AGCCITICAG GGATTICAAT AGACACATIT CITIAGCIGA AATCIATICT CICAGAAACT TACCCAAACT
TCTIAATAAT GINCAAATIC TAAGAAAGAT ATCATGGCTA CACAGCACCA GGNAGAGCAC ATTATITCTC TICACAATIC
CCTIGCATAG CATCATGGCT TCCTAAGGGC TITITAAGITT ATIGCTICAA CIGATTCTCA TAAAATCTCT GAGATGCTAT
CTGGAAAGIA TIATTATCCC CAGTTIGCAG ATAAGGCAAC TGAGGTCTAG ACTIGCTAAA AAATCACACA ACCACGIAAG
TGGGC

### SEQ ID NO:644: (Length of Sequence = 373 Nucleotides)

CTICACATCA GCAGCCGGAC GAGGIGACTG AAAATCCAAA ACAGAAAATT GCAGCAGAAA GCAGTGAAAA TGTTGATTGT
CCAGAGAATC CTAAAATGAA GTTGGATGGA AAACTTGACC AAGAAGGCAA TGATGTAAAA ACAGCAGCTG AGGAGGTACT
AGCTGGTAGA GACACATTAG ATTTTGAGGA TGTCACAGTT CAATCATCAG GCCCGAGGGC TGGTGGTGAA GAATTAGATG
AAGGTGTTGC AAAAGATAAT GCTAAAATAG ATGGTGCCAC TTTAAAGCAA TCCTNGAAGG ANCCAGAGGA GCGAAGGATG
CAGATCACTG CACCCGTACC CCAAAAATTG GAAAGTCCCC TCACAGGCCA TTT

### SEO ID NO:645: (Length of Sequence = 310 Nucleotides)

TTTTTTTT AAGACTCAAG GIAATGAAAA CTATGAGIAG AATAGIAAGG TGIGACAGGG GACAAATAAG TAGATATAAA ACTATGCTGC AATATTTTAG TTATTAAAGC TGGGAAATAT GCAAATGTAA GTAGTGCTTG GAACCAGAGA AGGTTCTATA TTTAGCTGTT CTTCTGTAGC TAAATCTGAC AAATTGAAAA ATATCATATT CTCTGCTCTA GGTACATTTT ATGTATATTT TGACAGCATA TCAAATATAT GANACATTAG GTTAAATAAA TTAAAATCCA GTGGGATAAA CTATATGGGG

## SEO ID NO:646: (Length of Sequence = 362 Nucleotides)

CTTGGGATTG CTAGATCAGT GTTTTAGACA GGAATGCCAA GGCAGAAAAG AATCACATAT CCAGGACCAC ATAAAANCTG
GAGTGTATGT CATAACAAAT TINCTCCTGT GCTTAGAAGT TTTATGGCTT TGGATTTTAC ATTGATGTT GCAGTCCATT
TTGAGTTACT TTTTGTATCT GATATGAAAT ATACCCAAGT NCATTTAAAA AATAAGATTA TACAGTTGTT TATGGAATGC
ATTTATGTAC ACGGTAATC TGTTTTGATT TTGTGTGTAT GTTAAAACAT CTTTATTATA GTATTNTGTA AGAGTAGGTT
AATATTGACC TTGGGCATTT TTAAACCAAG GGGGGAATTT CC

### SEQ ID NO:647: (Length of Sequence = 226 Nucleotides)

TTTTGCGTC AGATCTGTAA GTTTATTTGC TCAATGTACG ACAGCTACAT AATGNCTTAC ATTCATGATA TTCCATCACT
GAGGAAACTG CTAAAGATGG TCCGTGTGTG AAATAATTCC TTAGAGAAAC ACGGAGCTGG AAAAATAATC ACTGATTAGA
CCTTAAAAAAT AGTTCACTGC ATAACATGNC AAAAAGCACA AAGGCTCATT CAGAGAACAT ATTTGT

### SEO ID NO:648: (Length of Sequence = 198 Nucleotides)

AACTAAAAAG TIAAAACITT TACAAAACAA CAAGITITCC TTAAATTATG ATTTGITATI ATAAAAACTA GTAAGAAAA ATTCCACCAC ATGAAAGCAT TINCIAAAAT TCATACCCCC GTACCTATTT TTAANTACAG TTGGTAAATT GATTAAGCTC TATTINCATT TIGANIGATC ATCGGTTTTA TITTATTT

## SEQ ID NO:649: (Length of Sequence = 337 Nucleotides)

ACATCIGCAG CCATATATGA GGICCCTCAT GAGACITAGC AACAAGGIGI GITITAATGI GACAGIGIGI CIGATGIGIC CCCAGCACAT TOGGACCAGI ACACAGIGIT ATTIGIACAT CIGCIGAGIA ACATTGAGIG TGIGGGIAAC TAAAGCCCTC AGIAATTATT TTACITAATG TTITCAAGCT TAATICIGAT CITGIACTIG CATGATTTAT TATICCTIGI GCIAAATTCT TCAATGITCI TGCCITGATT GATCIGICAT TATCTATCAC TTAACTAAAA TANIAAATNC CITTAATTAA GICATGGITA AATGAGGGAC TITGITT

SEQ ID NO:650: (Length of Sequence = 286 Nucleotides)

GGGTTGAAAG GAAAGGTGAC AGGAAAGATG TGTTTAGCAT CCATGAGCAG CTGGGGAGAG TCTTTCCTGT CTCGTAAACG
CATCIGAGAA GATTAGGAAA AAAAATAAAC AGAGCATCAG TTCTTTGAAT CTAAAAGACT TINITCTACT AAAATTTCTA
CCCTCAAAATT CTCAACTAAT GAAGANIGIT TACTTTTGTT TTAAACTCAC TTCATTTTCC CAATTAACTA TTATCAAAAA
AGTTAGTGCA TTGTAAAATA AGNTAATAAA GGNTAACACA TTATCC

SEO ID NO:651: (Length of Sequence = 360 Nucleotides)

GATAATGIAA ATTITIGCIT CIGGGCTIGI CATCAGGATI GCAATTIINA GATTIAGIIT GCCAATTIIGA AAAATIATAT ACACTIGGIT TGITITGGIT TICTIAAGIC AAAACAAGGA AATAAAATCA CATTIGCITT CCAAGAAAAG ATAATGITTA AGGGTTGIT TAGIGITTIG TGICTITGGG GGIGGGAGGG GGIGTGTGGA ATACACAAAC ACACACACAC AAACACACAC AGICTATATA TAANCTIATT GGAGCCATCA CTATATTITA AGGAAAATGN AAATAATCTA TIGAAGCTITT AAAATTAGGA ATTITTGATT TAAGCTAAGG AGCCTATTTT

SEO ID NO:652: (Length of Sequence = 353 Nucleotides)

GRIGGIGGENN CCTGIAATCC CAGCTACTTG GGAGGCTGAG GCAGGAGAAT CGCTTGANCC CTGGAGGCAG AGGTTGCAGT
GAGCCGAGAT CGAACCACTG CACTCCAGCC TAGGTGACAA GAGCGAAACT TTGCCGGCAT TTACACTCTC AAAAGATTTA
ACGCAATTAC AATCAAAAAA CACTTGTCAT ATATAACACT TTTTCACATG GAAATAAATT GGTGGTTTAA GGTPTACAAT
TCCTTTGAAT AAAATTTCAG TTATTAGTTA CAAAATGCTA AGACAGATTG AGGTCTCAAA GAAAGANCTT TGAGGAAAAAT
TTATGGTTTT AAAGGGACTT TCACCAAATA TGA

SEO ID NO:653: (Length of Sequence = 224 Nucleotides)

AAGACAGGGA MIACITIATI CAAAACCCAT CACAGAAATG GACAGCITGG GICTGIAACA AAGCATTCAT GITTIAGNGC
ATAGGICAGI AATIGIATAT GAGAGCATAC ACTGCTACAT ACAAATTAAC TGNICAGACC ACAACTITIC AATGITTAAA
ACAGNATAAG CITCCCTGIA AAAGCAGCAC CITTIGIGAC GNITIAACTI TAGIATTCCT CTCC

SEO ID NO:654: (Length of Sequence = 353 Nucleotides)

GICAACTCTA TITICCATAT GAATTATTAG ATTIGGIGCT GICTIGIGAA GIAACTIGAT ACGATAGATG TGIAGIATGA
ATTITGICCA CATGGITGIG CCCTTGGCAG AACTGCACGT ACCTGAAATG GITCCCTAAT TITITTCTAG TATTACIATC
CAACACTICC TCTCATAATC ACTAGIGIAT TGIATAATIG TTAAGIGICC TTTATTCATA TATTTAAATT AAAAGAATAC
TCTGGIAGGA TITIGAGGGC CAATAGIGIA TTTCCACTGT TTGAGGIATT AGGAGGGCTA TITACTGATA CCTGIAGIGC
CTTCCCATIC TGGITTATCA TGCACCTCTA AAT

SEO ID NO:655: (Length of Sequence = 365 Nucleotides)

GAAACINACT TCACATTICT CCAGGGAGGG ATGCTTTGGA AAAACTGCTC AGTGAGATGA AGCACAGATC TGCTTTINAT
CCCTTTTGTA CCTTTTTAAA GACATAAGGT ATGTTTTGAC ACTGGAGTAT ATATGAGGGT TGCTAACGTT TAGGTTGAAA
GAGCTGCTGT TGTCCACAGC TTATTTATTT NCCACCCCATT TTTGTCTCCT GGTCTCATCC AGTTACATTT CCTGGGATAT
GTTTTTGGAG GTTGCTCAGA TCACGGCACT AGAGTCCCTT TGGGTTTCTC CTCCCTCCTC TGTCTATTTG GCCTCGCCCT
TGACAAACAT TCCCCACATT CACAACCAGG CCTTTGGCTA AATGT

SEQ ID NO:656: (Length of Sequence = 372 Nucleotides)

GTCATGAGTC TGAGACCAGC CTGGCCATCA TGGCAAAACC CTATCTCTAC TAAAAATACA AAAGTTAGCT GGGTGTGGTG GCGTGCACCT GCATTCTCAG CGACTTGGGA TGCTGAGGCA GAAGAATCGC TTAAACCTGG GAGGCAGAGG TTGCAGTGAG COGAGATOGO TOCACTIGCAC TOCAGTOTOG GTGACAGAGT GAGACCTTGT CTCCAAAATA AAAGAAATTT ACTGCAAAGG GATGITGCAT TTCAGGTGAA TGTATGTAGC CTTTCAGAGG CCGGGCTATT TATTAGATGT ATTTTATAAC TGAGGGTTCT AGGTAAACAC AAGCCAAACA GATCCACCAG AAGCCTAGAG CTGTGGACTC TT

# SEO ID NO:657: (Length of Sequence = 334 Nucleotides)

GETTGIGGAA AAAAAAACCI CCAGATAAGA TIGIGCCIGC TICATITICI TGIGAGGCIG CCCAGACAAA GGITACITIC
CTGATTGGGG ATTCIATGIC ACCIGATICA GATACIGAGC TICGAAGICA GGCAGIGGIG GATCAGATTA CCAGACATCA
CACCAAACCA TIGAAGGAAG AAAGAGGGC TATTGATCAG CATCAAGAAA CIAAACAAAC AACCAAGGAC CAATCIGGAG
AGICTGATAC ACAGAALATG GITTCIGAAG AGCCCIGTGA ACITCCCIGT TGGAATCATT CAGACCCAGA AAGCATGAGC
TTATTCGACG GATA

## SEO ID NO:658: (Length of Sequence = 286 Nucleotides)

ACAAACCAAC TGCATTTCIT TCTGGATAIT GITGAACAAA AATAGCATTC AGITTACCCN CTAGIGCTAA CAGAAGNENC TCAAGCIGIT CCCCCATCAT GGGNGCAGCC CTTAACAGAG GGCTGCACAA ATCTGCAGTG CTGCTCTGGG GAAGGCTNCA AAGCACTTTT TTCCCAAGAA GGGATGCTGT TCANGTCTGT TAGGGGAAGC ACACCGNCIN TGCCTGGGCA CAGATGAACT GCCCTTCAAG GCAATCATCA TCTTTTTCT AATAGGGAAG GTTTGG

# SEQ ID NO:659: (Length of Sequence = 321 Nucleotides)

GGICTITATA TGITICCGAG ACAGGACIGA AACICCCIGC C.TCAAGICA THITCCIAAG TAGCIGGGAC TATAGGCIGT
TICTITITIT AAAGGAAGGA TITTAIGITI ATCATGAAGG
GAGACACTAT TAAAAAAAAGG CAAATCAGAA ATTIGGAGAA . AATTITTA ATACIGATAA TAAGACAGAA TIGIACCCIG
TAACCATAAA TATGIAGAAT TICTACCATA TCAATAAGGI . ...AGITICT GITGCICCAC ATCCICTIGC ACGGITGGGI
A

## SEO ID NO:660: (Length of Sequence = 302 Nucleotides)

TTTGTTAAGG ACATAATGIT TTTGACTGGG GATCATGITT GGCTGATGIA AATATTAATG CCAAAATAGG AGCTAGGATG
AAAGTAACAC TGTAATTAGT AGIAGAATTT ATTTCATATT AAAATGIGTC ATGACGTAAT TTTTATGGCT TGGCTCAAGC
AACAATTTTC AGAGTGCACC CTCATTGATG CTACTCACAG AGACGTGGAT GTGCTGTTAC TGCTTTCTAA CTCTGCCTAC
TACGTGGCCT ATTATGATGA TGAAGTTGAT AAAGTAAACC AGTATCAAGG NCTAAGTCTA GG

## SEQ ID NO:661: (Length of Sequence = 249 Nucleotides)

AAAAAAAAA ACTCTCAAGG GTCTAACTTT ACCCATCATA AAATAATTTT GGTGCAAGGG TAGTGGCACA TTTTATTTAT
TTGGGATACC ATGCAGATGC AACCTAGCCC CATTCTTTAT GCAAAGTAGA TTATCCGTGC ATTTCTTCTG CATTCATTAGT
GAATCCTTAC TGGGGNCAAC TCATTCCATT TGGCAACAAT CTTTAATGGN CAGGCAATAT ATAACATTGC TGAAGTCTCT
TAGCACTAA

# SEO ID NO:662: (Length of Sequence = 340 Nucleotides)

TTTTTTTTG GCAGCCTTGT AAGGAGAACT TCACCATTIC CCAGCACATC CCTATGIGIG CGCCTATTIT AATGCACCTC
TCTGAAACAG AGACCTTTTT GITCACAACC ATAACTAAAG CTGGAAAGTC AGTCTTCAGG CAAGGCGAGG GAGGAAAACA
TCCCCATTAGA ATITTTTCAG GAAAGACTTA TGGNAAAAAA TATCTCTCTC CCACCTCCTT TTATCCCCAT GAGACACAGT
TTCCCACTGT AATCAGGGTA ATATGCATTT NTAAGTNCTG ATATGTGATA CATTTATGTG ATGGCAAAGA TAAGTCTGTC
TTGCATGCAG GGTACTAGAG

SEO ID NO:663: (Length of Sequence = 325 Nucleotides)

CACAACAATT CIATGAAATT AGCTGGGGAG ATACTGTCCT TATTTTCAC AGCTGAAGAA ACCAAAGCTT TGGGAAGITT GTGACTTCTC TGAGATCACA GCTGGTGATA GAAGGAGCTG GGACACGCGC TTGGGTTGAC TGGCTTCTGG TTTTGGTTCT CTGGCTTCTA GTGCTGGAAG AAGCCCTCTC TTTCCCTTCT CTTTCCTCAG TAGCATCTGA CTCTTTTCAT AAGCAAACAG CTGTATAAAC AAAGCCCCCA TTTTGGTCAA GCACAGGGTG AATGTGATAT TTGTTCCCAC AACCTTATTC TNCACTCAAC AGCCG

SEO ID NO:664: (Length of Sequence = 300 Nucleotides)

TIGCICAGAG AGATGATGIT TCATGGGTGA TGTCTCTGGA AGAGATTGGA TAGGACCCAA GCACAGAGCA AGAAATTGGC
TITAGGCAAG TCAGATTTGT CITATACTAG TTAGGAGTAA AGAGAAATTG ATGATACAGA TGCAGCTATG TTCGTAGGAG
GGAAGTGGGAG GGAATTTCTG TGTGATGGCT TTAGTAATGT AGGCAGCAAG GTCAACTACT GACAGTGAGA GGAGAAATTC
GGGGAGGCTG GTCACAGTTT GAAGTAATAG GTCATGGGGA GGCAGATGTT TGTGGGTGGA

SEQ ID NO:665: (Length of Sequence = 327 Nucleotides)

CAAATAAGAA COCAGAGAGA GGGAGAGATT CACAGACAAT AGCTTAAAAA GTCTAGAAAT TATAGACCGA TTGAGGTCAG
CAAGAAACAA ATTATTCAAT ATATCCCCTG AGGGCTAGAG CCAGACTTTC CCCTATGATT CCAAAATTAC TTCGCAGTTT
CATTAGGGTG AAAGGCAGTG CAGTCTCATG AGTTCAGAAA GTAAAGGTTG TTCCTTAAAA TTTAGATAGA CTTGACAACC
ACTTAGGATG GCATTTTGGC ATTCTGTCCC TGCTCATCAA AGAAGTTGCT CAAATTTGTG GGNTAGAGGA ATGAGGAGCA
AGAAGTA

SEO ID NO:666: (Length of Sequence = 319 Nucleotides)

ATTCCCAAGG AGAGGCTGAG ACAGAGAGGC TTTGAGCTGT TCCTCAGCCC CCTACCCTAA CTCCCTCCCT ACTGTTGATC
AGGCTGGTCT CTAACTCTGG ACCTCAGGTG ATATGTGTGC CTCAGCCTCC CAAAGTGCTG GGATTACAGG TGTGAGCCAC
CATGCCTGGC CTGGGTTTTA TCTTAAGGTC TTTGTGTTGC TGTTCCATCT GCATGAATAC ATTTNCTTCA TTTTACTTACG
TCTTAGCTTA AATGATACCT CCTCTTCTTT CCTACTGCCA TTATCTTCCC TTGTCACTCC ATACTCAGAT TTCATTGCA

SEO ID NO:667: (Length of Sequence = 288 Nucleotides)

GGIGGCAGGC TGCTTGCANT NCAACGCCAG GNGTTTCCTG ATGGGTCAGG GTGGGGAGGC TGCACACACA ACAAGGTCAC CCTACTACC CTTCTACCCA CCCTACCACA GCCCTGAGCT CACCACTCCC CCAGGGCATG GGACTCTTGA TAATTCCAAG TCCATGAAAC CCTACAATTA TTGCAGTGCG TATGANTCCT TCTATGAAAG TACTTCCCCT GAGTGTGCCA GCCCTCAGTT TGAAGGTCCC TTAAGTCCTC CCCCAATTAA CTATAATGGG GATATTTT

SEO ID NO:668: (Length of Sequence = 212 Nucleotides)

TONITICINI TICITATCIA ICINCITCAC CATGIGICII 030330CIGG AACATAGIAG ATGCICAATA AATATTGATI GAATGAATGA ATGAATAAAT CINCITACAC CICICATGCI TCAAACAGGG AAAGGCIAGA TIAITIAGAA GICTIGICGG GGATAATAAT NAGCICAGIG GAAGCCCICI AGIICICACI CGAGTITCIC CC

SEO ID NO:669: (Length of Sequence = 281 Nucleotides)

ATCITITCAA CCCIATCAAT AAGAIGITAT GAAAGAITIGG TICICTIGIT TACAAGIAGI ATAGAATCIT TITIGATCIT
TGACTCIGIG CIGCCIATCI CATCAATGIT GITGCIATIA ATATCIGICC TITAACACIG GAIGITGGGA TCTTAGIAAT
GTIGCCIGATA ATAGGATTITA CAGCAAAACT TCCATATCCC TIGAAGATAT GGTAGITTAT ATTACTATAT CGATAACAGT
TTIGCCIGIG GAGATTGAC TAGTITTAGG TGTITGGAAG C

SEQ ID NO:670: (Length of Sequence = 234 Nucleotides)

AATAAAGTIG GGATATITGA TIGITTTCTT TICIGATCTI TATGCTGACT GCAGTATCAG ATACCATTIC ATTGITTAAA
AATCTICCIT TITITITITT TITITITTIG CATTITGCTC TITIGICAT GITICAAAGT CAAGTTGATG GCCNCAAAAT
TCCAGAGGCT AAGCAATGCA GAAGTTTCAT CIACTGGCAG CTAGTTTTAT TICITAAAAA TACATTAAAT TAGG

SEO ID NO:671: (Length of Sequence = 252 Nucleotides)

CCTGAAATGI AAATTGITIT TAATATATIT AAGAGCACAC AGAAGTCITG ATTTATAAAA AAATAAATAT ATAACATGAC
AAATTTACTG ATGATCCIGG GGCTCTGAGG TCAAACTCIT TAAATGATCA GTGAAAACAT AAAACATCCA TGATCTGITA
ACACACACAG GGGCATATTC CAGTTGIAAA AAACAANTTC CTTGAAGGCT CAGNACGTAC AAAANTCAGT NITTINTGGCA
GAAAGCACAT CC

SEO ID NO:672: (Length of Sequence = 366 Nucleotides)

CCATCCAACT ACITACTCAA TCCTCTIGAA ATCTGCCTIT TGTAATGTAA CTGATAGGCC AGCGTTTTCT TTCACTGTGG
GAAATAAAGG CTACTTGGTT GCTTTAGGGA GGGCAACAAT GTCAGCTGCA TAAGCAGCAA GAATATTATA TTTNATTACT
AGTCCACCCT TAATAAAGAG AGAAACCTTA GGAAATGGAA AGAGGTGTCT GTTTTATATT TCCTTTGCTT TTCAACCATT
GTTTAGACAC TCTCCCTTCT AGTGCTTGGA GAACCTTCAT GGAAACTCTG TTCAGGTTCT TGACTCTCAG CGACANATGT
GGAGGTCTTT GTGGTCTTAG CTCTCTAGGC CTGAGAATCA CATACA

SEQ ID NO:673: (Length of Sequence = 349 Nucleotides)

CCTCCCATCT TGGCCTCCCA AAGIGITAGG ATTACAGGCG TGAGCANCCA CACCCIGCCT GGTIGIGIAC TCTITTAAAT
ACTAAGTITT TAATGITAAA TGCIGCTITT AGATACACIG TAAAAATACA CCTATCAATG AGIITITITIA TTAAAAAACAT
TGCAATTGTA CTAGNCTITA AATACTAAGC AATAATTCAG GCTTCAATGI TGGTTTATAG TTTTCTCATT TCTTTCATTT
AATACCTCTG TAAAATGAAG CAGTTACTTC CATTTTCCTG AGGTGAGATA AGTGCCCTGC ACAAATGITA TAGGNCCAGT
AAGTGAGGAC TGGAGCTCTG GATCCTAAT

<u>SEO ID NO:674:</u> (Length of Sequence = 256 Nucleotides)

GCACTITIGG AGGCCGAGGC AGTIGENICA CCTGAGGTTA GGAGTITIGAG ACCAGCCTGG CCAACAGGGT GAAACCNGTN
TTCGTCTAAA AATACAAAAN TTAGCCGGGC GTGGTNGTGC ATGCCTGTAG TCCCAGGTAC TCAGGNGGCT GAGGCAGGAG
AATCACTTGA ACCCGAGGTG GGGCAGGNGG AGGTTGCAGT AAGCCAAGAT CGCGCCATTG CACTCTAGCC TAGGTGACAG
AGTGAGACTC CATCTC

SEO ID NO:675: (Length of Sequence = 292 Nucleotides)

GAAGTCATTI TAGACTCICA ATTITAAATT AATTITGAAT CACTAATATI TICACAGTIT ATTAATATAT TIANITCCTA
TITAAATTIN AGATTATTIT TATTACCATG TACTGAATTI TITACATCCTG NIACCCTTTC CITCTCCATG TCAGTATCAT
GITCTCTAAT TATCTTGCCA AATTITGAAA CTACACACAA AAAGCATACT TGCATTATTI ATAATANANI NGCATTCAGT
GGCTTTTTAA AAAANTGTTT GATTCAAAAC TTTAACATAC TGATAAGTAA GA

SEO ID NO:676: (Length of Sequence = 392 Nucleotides)

ATCAAAGATT GCAAACATT ATTITGATCC TGGACTACAG TGTGGGGATC ATTGCTATGT TGGCTTGCCT TTNCTATCCA
AATCTGAACC CAAAGTGCAG CCTGGTGTAG CCATGCAGGA AGATATGTGG GATGCTGACT GGGATTTGCA TCAAAGCCTG
TTCAAGGGAT GGACAGGAAT AAAGGAAAAT NCAGGTCATA GATTGAGTGC TATATTTGAN GTAAATACAG ACCTTCAAAA

.

AAATATAATA TCAAAAATCA CIGCIGAGCI CINCIGGCCI TCCATACITA GCTCACCCCG GCACITGAAA TITCCACITA CIAATACAAA CIGCICCICA GGAAGGANGA GATTACITITA GNAAATCCIT GCAGGATGIT CCTGICTATG GT

SEO ID NO:677: (Length of Sequence = 333 Nucleotides)

CCCATGCTAA TITAAAGATA TACAGGAAGN GAAAAGTAGG AGTTAAGTTG GATGTTGTTA GAAGTTGGAT GITAGTATTA
CCTTCAGGAA CAGATCCCCA TGGCATGTCA CAGGCCTTAA TTATATACCT GGCTTTCTTA TTGTCTCCAC TTTATCATGA
GGACAAGGTC TTGGTTTCAT GGGAGGAACT TCTCCATTGA AATAAATGTC TGCCATGTCA GCACCGTTTG TNCCCTCAGT
TTTAATATAA TGGACCATAT ATTAAACATN ATTAAACATA TNTTTAAATN TGGTGTCACT AGGTAGATGC CCCAGNCATC
CTACTTCCCT CAC

SEQ ID NO:678: (Length of Sequence = 359 Nucleotides)

SEQ ID NO:679: (Length of Sequence = 339 Nucleotides)

GGIGGCACAT GACTATAGIC CCAGCTACTT GGGAGGATGA GGIGAGAGGA TCACTIGAGC TGGGGAAGIA GAGGITGCAG
TGAGCTGAGA TCTCACTACT GTACTCCAGC CTGGATGACA GAGTGAAACC CTGTCTCAAA AATAAATAAA GANAGAAAGA
NTATAAATAT TTTGTATCAA TTTTCAGCTT TTACAGTCAA TGAACTTAAG TCTTAATTTT GGTTACAGAA TTAAATATTA
ATATTAACAA TCAAGGCAAT GTAAAAGTAA AGTACAGTTG ACTGAAGCTG GGACACAGAC GGNAAAGAGA GTGAATGAAA
AGAAGGATAC TAATATTCT

SEO ID NO:680: (Length of Sequence = 356 Nucleotides)

CTGTATAATC AGGTATATCA CAAAGTCTAT AGTCTCTGAG ACATGGGTGA GTAGGTGTGA GCACCTGGTG AAACAGGTCA
GAGGAAAAGC AAGTTGGCGT TGGAGTCAGC TGTCAAGAGA TAGATCCGTG ATGGTATCGA GATCACTACA GACAGGTGGT
GGTCACCTAG TGTTGTCCGC TGAAATTTGG AGGGTTTAAT TTTTAATCCA AATACCATAG AAATGGATAT GAAAAGATGG
GTGACACATG CTGCACGTTG GGAAGTGGGG ATGACCAGGT GCTTAGTTGC ATGGGAGAGG CCACAAGTGC TTGGCAATGT
TTTCGTNGAC TTAGCCTCTC ATCTCAGGAA TTAGCT

SEO ID NO:681: (Length of Sequence = 345 Nucleotides)

GECCIGGIGI TIGECIGAGG IGCACIAGGA OCCCIGGOCG IGGIGIACIG GAIGGCAICA GIICIGAIGG GICANAIGIC
CATICIAACA GGIIGGIGCI GGAGAGGGAG CAGIIGITAA ATAICITIAC TATCICCCCI NCICCGGACA CCIAGAIGCC
CAAATATACA GCACGIAGIA TOGAGGCAGG CCCITIIGAT IGACAICAGA ATCAGGIITIG CAAIGGAATA GGAGCITICC
TICCICCIGI CACTITAGCC CCAGGCICCA CCICANAGIC IGGAAIGCIC ATACCIAIGG CAGGIGACCI IGIGIAACAG
NIIGGGGIITA AIGCCAITCI GICCI

SEO ID NO:682: (Length of Sequence = 302 Nucleotides)

CTCAGACATA TCTTTTTTC TCCTAGCATG ATGCCCACCC CAAGGTACTT ACACGTCTTC AACAACACCT TCCGGACAGC TTCGTGGTAT CTTGTGTGGC TATTCTGGTG CACGGAATAA TTCCCATCTT TTGAGATAAT GGGGGGAAGC CTAGTAGGCT

CIGGITCCIT CIGGICIGAA ATTAGAGTAG ACTOGITCIG AGTACITGGC AAATGACTAT TIGATTCICI GATICCCIGG NCICCAIGCI CACCAGATGC ATAGCAGGGA TCICTCCIAG NCACTCACAT CCAATTITCA GG

## SEO ID NO:683: (Length of Sequence = 329 Nucleotides)

GATTITAAAT AGITAAAACA TITTITITAAA TOCATAAGTA ATTOTTACTO TACTOATTIA TACACACATA TACTOACATG
TACACAGACA TACCTACACA CACACITATA AATACATGTA TACACAGAAT ATAGTAAGGT CITTIATCCC TITTCAATGA
AATAAATATT GIATTCTATA TITAGNATAA ATAATGITGA AAAAGTGATT TIGGAGAAAG GITGAAATGA TIGAGTCTTA
AGTGTGCAA TGTATAATCT ACCCCTTCT AAACATCGTG TITTAAGTAG TCATCTTACT TCAGAAATTA GAGGCTCAAT
GTGTTTAGG

#### SEO ID NO:684: (Length of Sequence = 281 Nucleotides)

AACATGGCTG ANTIGAGATT ACACTGCCAT GATACATTEN CTGACAGCAC TTCACATTIT CCCTGAGTTG GOGACAGAAA
TCACACTGCC CAAATACATT ATCTGATGGC TCCTCATGTT TCCCAAAAGGT TAGGAAAGGA GGTTCTATAT ACATACATGC
ACAAGTGCAT ACACACACA ACACATACAC ACACACACAG TGCTAGATGA GATGTTGANT GNCATAAGGA AATGAAAGTN
CCATCTCTCT NFINCCTACC CCCTGCATCT GTCCCTTNAT A

### SEO ID NO:685: (Length of Sequence = 324 Nucleotides)

ATTITIAATA ATTITAAACT AGCTACAAAA TGICAATCAC TICACAAACT GACAGAGGAG ACAGGAGGAA TITAATATIA
CATGCTATAA TGATATITAT CICACAGITI ATATITICATT CATITATATT ATTITITITAA AAGGITICIT TATCAGCTAC
TAAACATCIC AGCAATITGG TGIGCATAGC TCTAGATTAA GCAACAAAGN ATTGTACTGA TAACAAACCA CAGGGGAAAT
GGTGGTTAGT AAGAGTCAGC CITATAAAAT TTACATCCAC ACIGITITCA CAGCAAGNIT GCTCTCTCCA AAACGGTGGN
CATC

## SEO ID NO:686: (Length of Sequence = 380 Nucleotides)

CARGAGAG GAGGAGAAA TTCCCCCAGA TTCGGGCAGG CCCGCACCCC ACATTCCGTC CIGITITGAG AGGAGGAGGG
AAGAGAAATA AACGIGGCAG CGCATAGAAG GCCAGCAGGG AGACIGCTTT CCAGACACCT CCGGCCCACA CAGCCGITCA
CCCCCCGITT TTTCAGICCT GGAAAAGGAA TTCGGGICTG TTTTCCTTTT GGGCTCTGTG CAACTNCAGC TACAGTGGAA
AAAAGCAAAC TGCTCTTGAT CCCAGGCCCT GCCTAAGCCT CAGCAGAACT TNTAAGCCTA AACTINAAGA GCCTCACCCG
GACGAGCAGG CATNCCTTAA CCTTAAAGCA ATCCAGITTC ACGGCCTGGT TCAGTGGAAT

### SEO ID NO:687: (Length of Sequence = 305 Nucleotides)

GACACITCCC CICITITATE GAAGCATAGI AAGATITITC CITTATGGCG ATCATGATGG AGAAGTATAT GCTACAGGAG
GNEAGGITCA AATTGCAATG GAACCICAGG CACTATATGA TEAAGTAAGA NCINTECCAA TIGCAAAGCI GGATAGGACA
GITGCTGAGA AAGCTGITAA AAAATATGIA GAAGATGAAA TGGCAAGGCI CCCTGATAGA TTGTCAGTAA CITGGCCTGA
AGGAGATGAA TTATTGCCTA ATGAGATTAG GCCTGCTGGA ACCCCTATTG GTGCGTTAAG AATTG

# SEO ID NO:688: (Length of Sequence = 390 Nucleotides)

GAAGTCATAA GGCCTAAATA TTAATCCAGT CTGTGACAAC GACAAGGTGA ATACAAGCCA GTCTCTACTT CTCTGGGCCT
CTGTTTTCTG CACTTATAT AAAGATTGGG CAAGATGGTC TAACTTAAAT TTTATGATTC ACTAACTTGA TTTTGTATGG
GGCAGATTTT NCTTCGATGA AATATTAACA AATAAGANCAC TCAAATAAAT CAGCAATGGG GTGCAGATGA GGACTACCGT
TTCTACAGCA AAATATGGGT GAACTCAGTA AGTGTAGGAA CACAGAAGTT AATGCTGACC TCTTGCATAG CATGTATGGG
ATATTAAATC ATTTCCTGCC TTCCATTTCA GGGGTGAGGG AGGAACAGCT GTTCCTGAAC TCTTTTAAGG

SEQ ID NO:689: (Length of Sequence = 315 Nucleotides)

GATTTAAGIG TIAGCATTIC TAAACITGAG ACICTAACAG TAAAAATAAA GIAATCIGAA ACCIGITICC ATGGGTAAAA
CACTCIGCCT GGIATICIIG TACACAAAAT TIACIAAATA TGIGAATATC ATAAAATGAA AATATCACIC CCITCAATIT
CITIGGCCIT CACAAATICA ATGIGACTAT GATCCITITC AATAATACIT TCAATGACAT TGIGCTICIT TAGAAAAAATC
ACITAAGIIG TAGCATACAA TAGITAACAT TAGICCITIT ATIGCTATGG TATATGCTAA TITTITTTAAA AGGGG

SEQ ID NO:690: (Length of Sequence = 291 Nucleotides)

TTAAAATACT CCATATATTI NAGAAGCAAT TGAAAATGCA TCCATGIATG INATTIGAGC GITACTAGAA ATTIATITAT ACAAATCCAT ATTAATGTGC TAATAAGTGA CAAATATATA TATAGTCATG CACTGAATAA TGATGTTTTG GICAACGATG AACTGCACAT ACAATGGTGG CCCCATAAGA TTAAAATAGA NCCAAAATTT CCTATGGCCI AGTGATGCTG TAGCCATCAT AATGTGGTGG TGCAACCCAT TACCTTTTCT ATGTTTAAAT ATACAAATAC T

SEQ ID NO:691: (Length of Sequence = 451 Nucleotides)

TTGAGCATCC GGAATATGGA GAAGTAATTC AGCTACAGGG TGACCAACGC AAGAACATAT GCCAGTNCCT CGTAGAGATT
GGACTGGCTA AGGACGATCA GCTGAAGGTT CATGGGTTTT AAGTGCTTGT GGCTCACTGA AGCTTAAGTG AGGATTTCCT
TGCAATGAGT AGAATTTCCC TTCTCTCCCT TGTCACAGGT TTAAAAACCT CACAGCTTGT ATAATGTAAC CATTTGGGGT
CCGCTTTTAA CTTGGACTAG TGTAACTCCT TCATGCAATA AACTGAAAAG AGCCATGCTG TCTAGTCTTG AAGTCCCTCA
TTTAAACAGA GGTCAAGCAA TAGGCGCCTG GCAGTGTCAA GCCTGAAACC AAGCAATACC GTCATGTTTC AGCCAAGCCC
AGAGNCCTAA GGTTTACAAA CAAACTATGG NCCGGAACCT CCTCAAGTTC T

SEO ID NO:692: (Length of Sequence = 363 Nucleotides)

GATTTINIGA TIATIGATAT TAGAAATGIT TAAAATTAAG ATATTAACAT TICATGAAGC TGAGIGGIGA GCACACCAGT
TITATATICI CICIATATAA CITIGIGIAT ATITGAAATG TITICICATA AAAAGTATIT AAGCAAGITT AGGAAAGAAT
AITGATAAAT GAAATCIAGA GACCATCAAA AGCCAATTIC ACCATCACAA AGIATAATTG TGITICAAAT ATAATTGAAA
TIGIGIGACT GITGCATATT CICTITITIG TIGITGITAA TGAAAGCAIC TIAAACAGIT GCCITICAAA GCIGITATCT
TIGATANIAA CATACATTAA CCTAACATTG TGGACTICIG TIA

SEQ ID NO:693: (Length of Sequence = 269 Nucleotides)

TTAÀGGGICC CAAGACIGCT CIAACAACAA CACCCATITC CATAAATATG GYICAATAAA CACTTATTCA TICTTTATAA
TTAGACICTA TIGTTAGAAT TGITTTAGGT TIATAGAAAA ATTGAGCAGA TAGTACAGAA GATTGCCATA TACCCCTCAC
CCACAGAATT TCACAATITA CCCTGCGATT AAAGICTAAT GITAATATGA TATATTTAGT ACAAGTAGTG GGATTATATT
GATACATTAT TATTAATTAA AATCCNCAA

SEQ ID NO:694: (Length of Sequence = 330 Nucleotides)

GOCATAGICA CITCCAGACA TOGITGCCIC TOCATGIGGA GIAGGICAAA GICTCOGICC TCCCTGGCCA GGIGGAAGCT
CCAGAGGGAC ATGITTCAGC TTAGIACAAG GIGGCTGACA CIACTCCTCT GIAGGAAGAG GCTGGCTGGA GGIGAGGGCG
CCCCACTCAG CCTGIACCCA TCAAGAAGIA TTCAGAAAGG ATGICTCTGG CATCCACAAG ACIACTGGGC GAACCACACT
GCAAAAATGA AAACTAGCGI ACACAATTTA AATTGGICTI AAACAAGCAA ATAATCCAGC CATTGGTGAC TCTGGGAATC
TAGAGTGCAA

SEO ID NO:695: (Length of Sequence = 344 Nucleotides)

CACTGIGACG GATGAGTGGA TATTTCITTG TACCCTGAGC TCTTCATCC TACCTTGGTG GICAAATGIG AGAGCAAGTG
CTTTGGGGCT CAGAGGGCAT CACTCCAAGC ATTCTGCATG GAGTCTGTTG TGGTGAATGI NCTTGCTGGC ATCTTGATCA
AGGACTTTGT CATCATTAGC CATCAAATGC TTGTTGGTCC TTCTCAACCC TGTAATGITG ATACTTAAAA AACTGGAAAC
ATCCTGACAG AAACAGTCGA GAAAGTGGTT GTGTGAGCTC TGGTTATCGC ATTACAGTTA AAGTTGGCAG ATAGGTTCTG
TATTCAGTGC CCCATCAAAA ACAG

## SEO ID NO:696: (Length of Sequence = 324 Nucleotides)

CTTGAACGTG GCAGATAAGC ATTTTGATAT GCTGCTGGAT TCAGTTTGCC AGTATTTTAT TGAGCATTTC ACATCGATGT
TCATCAGGGA TATTGGCCTG AAATTTTGTT GTTGTTGTTG TATCTCTGCT AGGTTTTGGT ATCAGGATGA TGCTGGCCTC
ATATAATGAC TTAGGGAGGA GTCCCTCTTT TNCTATTGTT TGGAATAGTT TCAGAAGGAA TGTTACCAGC TCTTCTTTGT
ACCTCTGGTA GAATTTGGCT GTGAATCCAA TAGACACAAT AAAAAAATGA TAAATGGGAT ATCACCACTG ACCTCAGAGG
AAAT

# SEO ID NO:697: (Length of Sequence = 341 Nucleotides)

AATTAATCAA TCAGCCATTT TGGTGGCCGA AATTTATAAG GCAAGTAATA CTTTTAGTTT CTTTGATAGA CACCATGATC
AGAAACATAG TCTCTTTCTT AAAGGGAAAA TAGGAAGTCT TCTGAGTCAT AACAGATGCA TGCATAAAATT TCTCTGAGTC
TTCATAAGAA ACACAAGCAA GATTTCACAG AGGCAGTGGA ATTTGAACTG AGTCTTGAGA AATAAGCAAT ATCTGAACAT
GTAGAATGCA AAATAAAGGA TAAGCAAGTG CTAATGCCCA GAGGGGTAAT ACATATTAAA TANCCANTAA CCAATTGCTA
CTTGTGTTTC TTACACTAGA A

## SEO ID NO:698: (Length of Sequence = 317 Nucleotides)

GCAAACCAGG AGAAGCAGAA GAGCAGGGTA AACCCTGGGT ATAATTTGTC TAGACCCCCA TGTCTCCTTT AGTCTGAGTT
CTGACATAAT TAACTGTCTA TGAGATGTAC TGGGCCTTTC CTCATTGCTT TTTGATGCCA CCTCACTAAT GTAAACAAAA
CATTCATTTT TTCATCCTAT TTTTTCTTAC AGCTGCTTAG CACAGTCCTT ATGAAAAAAAT GAAGCCTTGA AAATGGTATA
TCCTCTCGGAC AAAGCTAAGC CTGACAAGTT GGCTGCATTA CCTAGGAATT AGAGAAGAGC AAGGGCAGAT GGTGGGG

# SEO ID NO:699: (Length of Sequence = 385 Nucleotides)

ACCAGGAGAT GGAGGIGCTC TAGACTGIGA TGCTGGGAAA GGATTGTGGG CTAGAAAAAG GGCTCCCTAG GGCCGCATA
TGGGCCACTG GGTGGAAGAG GGGCTCTGAG ACCCTCACCC TGGAGCAGGT CATCACCCAC ACCGAAGAAT GAAGCGTGAA
TTCGGTCACG CTTAAAATGT TGAATTGITG GCAAAAAGCCC AAGTTAATGA AATAGCATGG AAAATGGATG TGATGAGATT
TTTGAATTGT AATTAGATTA ACATTGTCAC TAGTTATCAG TCTGATATAT CTTATAAATC AAACGTTGGG TTGATTTATC
TTTTATCACT TCTAGGGRCT TACTCCTAAC AGTAACTCAC AAACCCAGCC CCAAATCAGA GGCTT

### SEO ID NO:700: (Length of Sequence = 315 Nucleotides)

ATCAGTIGGA TITGCAGAGG ATTGGAAGGC AGCACCAGGC AGGCTCAGAC TCACTGCTGA CAGGAATGGC TTTCTTTAGG ATGAAAGAGT TGTTTTTGA GGACAGCATT GATGATGCCA AGTACTGTGG GCGGCTCTAT GGCTTAGGCA CAGGAGTGGC CCANAAGCAG AATGAGGATG TGGACTCTNC CCANGAGAAG ATGAGCATCC TGGCGNTTAT CANCAACATG CAGCAGTGAT GGCGCCCAGGC TCTTCAGGNT GGGCCTGATC CCNCAGTGGT GCTTACTNTG CTGACTGTGT ACTTATCTTC CCCCAA

#### SEO ID NO:701: (Length of Sequence = 387 Nucleotides)

 TGTAACTTCC ACCTACTAGT AACTGAAAAC ACGCATGTGG GAACATTGCA CAGATGGATA GATGCAGAGA TGAAAGGAAGG AAAGCTAAAA TATTINCCAC GTGAAAACCA TGCATCCTGT TCAGAAACTA ATTCTGCCTT CACGCCTTCC AGGAGCATGG GAGGGGTGTC GTCCTGGNCC TTTTGTGGAT GAGGGGGACC ACATGGTATT TCTACTGAAA GAGTTTT

SEQ ID NO:702: (Length of Sequence = 397 Nucleotides)

CATCAAAAAA AAAAGGAGCT AACTAGATGC TGTCAATAAG AGACTCACTT TAGATCIAGA GACACAGGTT CAATGIAAAG
GGATGGAAAA ACATATTCCC TGTGGAAATC CCAATGAGGG TGCTATGGTT TTGCATGTGG TTTGTCCCCA CCAAAACTCA
TGTTTAAATT TAATTGCCAA TGTAATGGTT CTGGGAGCCT GGGCCTTAAG AGATAATTAA GATGGATTAA TGTCTTTTCCC
ATGAGACTGG GTTAGTCGAG ACTCTTGCAA AAGCATGTTG TCGTTAAGTG GGTCATCCTC CTTTGTCCTG TCTCTTTTAT
ATACACTTCT TTCCCCTTCT ACTTTTCCAC CCTATTATGG AAGCACCGTG AAGCCCTCAC CAGATGCCAC CACCATG

SEQ ID NO:703: (Length of Sequence = 374 Nucleotides)

ATACAGGGTT AGACCAAAGA GGGAATTCAA TGAGGCCTGA TGGATTTATG GACCAGAACA ACAGAGGGGT CITGAAGGAA
GGAAGATATA GAAAAGGCAA GGTTGTGGTT AGAGAGGAAA TCCCAGAGTT TTAGCTCTGG GAGGTGTAAT AATTTCAAAA
GAATAAGTCC AGGCCTGGCC ATGACATGGG AAGCTGAATC TCTGCAATGT TTTTTCAAAT AGCATAATGG ATATCTTTGA
CTCCTACCCT GAAGCCAGAA AATATTAAAC TTGCATGTAT AATCATACAA ATGTATGCAT ACCTATTTAT ACATACATTT
ACATATTTTA TACTTATGCT TTCATATATT CTACGTGAGG TACAATATAC TCCA

SEQ ID NO:704: (Length of Sequence = 422 Nucleotides)

GGCAATGACA TAGAGATGAT AAGAAACAAC ATGGTTTGGT AGAGGGAACA TTTGATTTAG ACTCTGCCCA TTTTAGCTG
TATGACTTAC ATAAGTCATT TTGTGTCCAA GCCTCATTTT CTCCCATATG AAAAGTGAAG GGGTTGGATT AAATGACTAA
AATCCCCTTC CAGCCCTATG AGCCCAATGT ATTATGATCT CTGCTTTGTT TCCTCTTAA GAGGCTTCCT ACTATAAAAT
GTGACCTATT TACATTTTAA GTTGAAGTAG CCCACAATAA TGAATAATCA NTTTAGATTT TCCTCATCTC CTTTGGGAGA
AATTAAATTC AAGCCTCTAT TCATTTGATG TTTTTACAACA AGCTTCAAAG TTGGGCCATG GTTCATTCAC AGTTTTGATA
TTTTGAGGAC ACCAATAAAA AG

SEQ ID NO:705: (Length of Sequence = 229 Nucleotides)

GCTGCGGNTC ATAACAGCTG GACTICACGCC GNTGACAGAG TCTTGATCAG TCCTCTGGGA ACTAGACGTC AGGCTCACAC
CACTGTCTGC GCTGATCTGG GNCTTTTTCT CCTCTGTCTC ACCAAGGTCA AAGACAGGTT TGATTACTTC AGGCCTCTGT
TTTTCCAAAG NTTTTTGCTT TNNCACTTCC TGGTGCTTGT TCCACAATTC AATAGATGCT ATAAAATTT

SEQ ID NO:706: (Length of Sequence = 255 Nucleotides)

GAGGACTIGIN TACCTCAGTIC CTCTCTCTAA ACTCCTCAGC CTCCCAACAG GGGCCTCCTC ACCTGGGTTC TGAGTGTGTA
CCCCTTTTAG AGAGTGAGAT GCCACCCGGG CAGCACTCGT TAAAGCTGGC CAGCACGAGT GACTAAGGGG AGAGAGCATG
ACATAGACCT GGGTGGCAAC GGGGACCTCT GGAAGCAGGT GGGAGTAACA NAGGAGAGGG CAGTNGAGGG TAGAGGAAAA
GGACCTCCAG AGGTT

SEQ ID NO:707: (Length of Sequence = 324 Nucleotides)

CCENEAGTGI GCCACTGCAC TCCACCTTGG TGACAGAGTG AGACTCCGTC TCCAAAAACA AAAAAAACAA AGITGAACTA
TAAACTGAAT TCCTCCCAAG GTTAGTTCAG CCTATGCCCT GGAATGAACA AGGACAGCTT GGAGGTTAGA AGCAAGATGG
NGTCAGGCCA GATCTCTTTC ACTGTTAACA TTTTCTCAGT TATAATTTTT GCAAATGTGG TTTCAGTCCC TGCATCCATA

ATACCTAGAA ATTITIGATAA ATACTTIGITA AACAACCAAA AATAAAACAT CCACAGCAAG GANTOGACTA TAAGGCGITG

SEQ ID NO:708: (Length of Sequence = 325 Nucleotides)

SEO ID NO:709: (Length of Sequence = 264 Nucleotides)

GGGCCCGGTT GCATGAGGCA CITTGTCAAA ATGAGCAGAT ACGTATGAGC ACTGAACTCT TGAGTGAATC AACCAGAACT AAGACCCAGA TCCACGCACT CAGGAACTTG CTCTGAATTT CAGITTGACA ACAGAGAAGT AGAATATTTC TAATTAGCTA ATATATATAC ACATTTTTTA ATCATCCAAA ATTACAGGCA AATCACTTAA GGTCCCCAGC ACTTTACGNT GNAAGGTCAG AGAGANCCCC ACAAAAAAGG TGTT

SEQ ID NO:710: (Length of Sequence = 366 Nucleotides)

ATTITIATIA TATACATATC AGTACICACA ATACGITGCT TATTIAAGAT GGCIGITTAT AAGIATAAAG CAGTITGAGC AACACIGATT GIGCATTATT GIACITCAGA TGAAAAATCC TTACATGCGG AATCAATGIC TTITAAAATT TCAGATAAAG AATTINCATT TGAGGAGACA TACAATIGIA AGTGCTCATT TTITGTCAAT TITAAGACAC CATTATGIGT AAGANGGATT AATTINCCA TAAAATTACA AACACCCTCC ATGICTIGAC ATTCACATGG AAAGGGCAGC ATAACCATTT AATCATCCAA ATGCATATCA GAGCAAACTC CTAGGGCCTT TAGGIGTGAG GGTGGA

SEQ ID NO:711: (Length of Sequence = 216 Nucleotides)

GAAAAGCAGA AAAAAGTGGG GAAGATTTTC TATCTTGAAC TTGTGAGCTG GAGAATTACC ATTAGTAGCC CACTAATAGG
TTATGGCCGA TGAGTCCCTT CATAACACAC TGAGAGCCAC TTTTGACACT CCCAGAAAAG GCAGGTTAAC AAAACCCCTT
GATGGAAGGT TAGACCCTCA TTGCCCAGTG TACCCAAGCC TCTTTGAACC TTGCCT

SEO ID NO:712: (Length of Sequence = 276 Nucleotides)

ATTITITICC CATAGCACGI ATCACTCICI CATGIGITAC CIGCIACACI AGAATTATGA CCCCTAAGAG GGAAGAGACT ATGICAGTAT CATTGATTCI NATTAACACC ATTATTITAGA ACCATGCITG GCITAAAGIA GIAGCIGCIC AGIAAATATT TATCITATGIG TGAATTITITA AGINCTICCI TIATATIGAN TIAAAATTAG TCICITGIGI GCAGCAGICT GGGITTGICT TATGITGAAA TACTITATGIN GACTICIACA TACATT

SEO ID NO:713: (Length of Sequence = 354 Nucleotides)

AAACTTIACA ACCIGCACAT TIGITATGCA TACTAAATGG TGIGITAAAA TTAGGGTTIC TITGCCICIC TACACTACAC
TAATCIGCCT AAAGGIGGIT GITTCATATT TATAATGCTA ATTATCATAC CTACCTACTT TAAATTITAG GIAGAAAATT
ATCIGATITA AATACAAACA TATTTITCIC ACATTGAGTA ATATGCATAA TGIAGITCCA AATGTATITC ATTACTATAG
TCACAATATC CAACTAAAAA TTACGCTATC TAGAATTGTA CCANCCAAAA TCTCGTATTG GCAGATCITG ACAGGCTGGA
CCTGCAAGAN TGIGGCTTGG AATTTTAAAC CCAT

SEO ID NO:714: (Length of Sequence = 349 Nucleotides)

CAGIAATTCT CITACATCCT TCCCAAAAAT CAGIGTCTAG GGACTAGTIG ATCTGGATGA GITATACATG ATATTTGACT
TINCATAAGT AGGGAAGGT TTCACTAAGT AAAGATCIGA GITTCTTGGT ATCTGACGIT TGTATACAGA TGGTGTCCAT
TTGCTCAACC AGACAGGAGT TAACTIGTAT TAGAATTGTT TTTNCTAAAG TNATGTTACC TGAGAAATTA AGGACTGCAC
CTGGTTTAAT GITGCTTCAC TTATCCCACC CTACAGAGAC CAGCAAGGTT CTGCCAGGCC TCGAGCATCC AAGCATGATT
TTCCTGTGAC AAAATCTAAA AATCCAACC

SEO ID NO:715: (Length of Sequence = 302 Nucleotides)

ATATTIGAAA AGATCTICAC CAAAGATATA TGGATAGTAA GIAAATATAT GAAAGGITTT CACTGITAAT GATAAAGGA
AATGCAATCT TGTACATGAA TGITTATAAC AGCATCATIC ATAAGAGCCA AAAGGIAGAA ACAATCCAAA TGITCATCAA
CTGATGAATG ANTACACAAA ACATAGTATT ATCTATATAA TGGAATATTA CTTGGCCATA AAAAGAAATG AACTGGGCCA
GGCGCAATGA CTTACGCCTG TAATCCCAGC ACTTTGGGAG GCTNAGGTGG GCGGACTGCT TT

SEO ID NO:716: (Length of Sequence = 314 Nucleotides)

GTATTITTAG TAGAGACGGG GTITCACCGT GTTAGCCAGG ATGGTCTTGA TCTCCCTACC TCGTGATCCG CCCACCTCGG CCTCCCAAAG TGCTGGGATT ACAGGCGTGA GCACCTGCGC CCCACCCCAT TTTGGTGTGA TCTCAGCTCA CTGCAACCTA CCCCTCCCAA GTTCAAGTGA TTCTCCTACC TCAGCCTNIT GAGTAGCTGG GATTACAGGG GTCTGCCACC ACGNCTGGCT GATTTTCCTA TTTTNAGTTG ACACTGCATT TCACCAGGNT GGCCAGGCTG GTCTCGATCT CCCTGACAAG AGGG

SEQ ID NO:717: (Length of Sequence = 279 Nucleotides)

ATAAAAATGC TACAGATTIT TGIATGITGA TITITITATCA TGCAATTICA CIGAATTIGI TITICAGITA TAACAGITTI
CTIATGGAGI CITIGGITTI TACCAAATAC AAGATCATAT CATCIGCAAT CAAGGATAAT TIGACTICCT CCITICCAAT
TIAGATGICC ATTATTITIC CICTIGICTG ATTGCICTAG CTAGGATTIC CAGTACIATG TIGAATAACA ATGGIGAAAG
TXXGTATCCT TGICATATTC CAGGGICTIG GAGGAAAGG

SEQ ID NO:718: (Length of Sequence = 161 Nucleotides)

AAGAAAAAA CATAAATAAT ATTAGAAATG GAAAAGITAT AAATCAACTA CAGCAAGGNT TTAAAACTAT TATGAAACAA ACCAAGTAGA AAGTAGATCT GCCAAACAAA AAAGGAAAGA NACTGTTTCT TTCATAAATA ANTGACAATG GGGGAAAAAG A

SEQ ID NO:719: (Length of Sequence = 220 Nucleotides)

GACAGAATTT TITTITTTTT TITTITTTGA GACAGAATCT COCTCTGTCA CCCAGGCTAG AGTGCAATGG CGCAATCTCG
GCTCACTTCA ACCTCTGCTG TCACAAATAA ACATCAGTAA GAGCCAGCAG TTGCTCTAGG ATCTCAGTCA GCAAGCTTGG
GGGCTGTCAG GAAACCAGCA GTCACCTGTT TCTCCCTCTC CCAGCCCAGG GCTGACCCCT

SEQ ID NO:720: (Length of Sequence = 347 Nucleotides)

SEQ ID NO:721: (Length of Sequence = 313 Nucleotides)

AAAAGATTIG AACAGATAAT TCATCCAAAA AAAATATGGG TGGGAAAAAA AGCACATGAA AAGATGCTCA ATATCATTAG ACATTAAGAA AATATAAATT AAAACCACAA TGCAATATCA CCICGIATCT ATTAGAATGT CTAATATTAG CAAGACTGGC CATATAGAGT GITGGTGAGG ATGIGAACAA CTGAAACTCA TACACAGTGC AGGTGGAAAT GTAAATGATA CAATTTTTTT GGAAAAGAGT TGGCTGTTTC TTCAAAAGTT AAACATTACA TCTGCCATAT GVTCCAGACA TTCCACTCCT AAG

SEO ID NO:722: (Length of Sequence = 266 Nucleotides)

SEO ID NO:723: (Length of Sequence = 370 Nucleotides)

ATTATTCATG AAATAATCCA TGTAACATCA CTTAGCACTG AGAGTTAACA AAGGCAAATG TTACCTGAAT AGGAGGAAAC
AGAGGAAGAA CAACGAGGTC TCTTTTATCT ATGCTAAGCT TTGTCTGAAT AGGAGAGAAA TGTGTGGCCT GTTGGTGAAT
TTATTGCTTT GTGGTAGTAA TGGATTTYCC TAAAGCTGTT TCCCTCTGAT CATTAATAAT CCCTGTACAG CAAAGGACTA
TTGTCCTTTG GTATGAGTAA ATAACCCTGT TGGAAGCACC GCTTATCTTC AGACCACAGC GCATACTTCT TACTGGAAAA
TATAATGCAG GTGCCAACAC CCAAAGGCA TGACCAGGGG TTCCCCTTCC

SEQ ID NO:724: (Length of Sequence = 478 Nucleotides)

GEACACAACT GAAGTGIGGA AGAAATGAAA GGGCGAAGGT GIGITTIGAG AAGGCTCTGG AAGAAAAGCC CAACAACCCA
GAATTCTCCT CTGGACTGGC AATTGCGATG TACCATCTGG ATAATCACCC AGAGAAACAG TTCTCTACTG ATGITTIGAA
GCAGGCCATT GAGCTGAGTC CTGATAACCA ATACGTCAAG GTTCTCTTGG GCCTGAAACT GCAGAAGATG AATAAAGAAG
CTGAAGGAGA GCAGTTTGTT GAAGAAGCCT TGGAAAAGTC TCCTTGCCAA ACAGATGTCC TCCGCAGTGC AGCCAAATTT
TACAGAAGAA AAGGTGACCT AGACAAAGCT ATTGAACTGT TTCAACGGGG TGTTGGGAAT CCACACCAAA CCAATGGCTA
CCTCTATCAC CAGATTGGGG TGCTGCTACA AGGCAAAAGT AAGGCCAAAT GCAGANTACA GGGGGATCTG AAGCTAGT

SEQ ID NO:725: (Length of Sequence = 356 Nucleotides)

GACAGAGGAG AATAAATGGA ATAACITAGT TTIGIGAAAG ACTCACAGIA TCACTIGGIT TCIGGACACG GITCGAGACC
TGGCIGIGGC TIGCIGIGGC CITGAGGACC ATCCCACAGC AGCAATGCIG TIGGACCCIT TGGCIGGGAC CITCAGGACC
CCCIGCAACA GCACTGIGIN CCTAACCIGC TGGCAIGATG CCCCTTINIT GACAGGGCTG CATACAAGGC CAGCGACAAG
TGGCAGGCAG TGACGCCAGC CIGGATITGC TGAGGGCACA CGCCATGCIT CCTGCAGTGC CAGIGCTCTT CINGGICCAC
TTIGCAGCAA GGATAGATGT GGITCTAGAT CCCAAGA

SEQ ID NO:726: (Length of Sequence = 387 Nucleotides)

GIGGIAGAST AAATCCIATT ATATCGAGAT ATTGGICAGG CAAGAATTIT NCTTTIAAAA TAATTTATTG TAAATGAACC
ATAAAATTIT NACCITIGIG CCATCITCIA GGCTATAAAA TAGICITATA AAGAATCAGA TIGITAAGAG TATATGAAAT
GIGGATATGG ATGTGGAAGA TCCATAACGA GGATGATGAA AGCACATTAA GAAGCTTTCI GATGGGTACA AAAAATAGAA
TGAAGAAGAT CTAGIATTIG AGAGCACAAC AGGGTGACTA TAGICAACAA TAATTTATIG TGCATTITCA CATAACIAAA
AAGIATAATT GGGATTGTAA CAGAAAGGAT AACIGCITIG AGGTGATGGG ATACCCCATT TIACCCC

SEQ ID NO:727: (Length of Sequence = 348 Nucleotides)

CCTTILARGE AGGGRATCCE CTGGTCCCCA CCCCCAACTT TATATTCATT AGGCCTGAGG TGGGGCCTGG GAATCTGGAT
TTATALATTG CTCCCCTATG ATTCCAATGC CAGTGGGTTT TAGACCACAT TTTGAGAAAC AGTGCTGTAA ACTGTTTTCC
ATTTGCAGTG AAGGAAAATG TAGGGTTTGT GTCGTGAAAC TATGCAGAGA AATTGAATAG TATTTNAGTC TAATCTTGCT
TTTAALTAAC ACGGAAATTT TGAAAGTCGG CTTTAGGGAG TTCCAGAACC TGTCCATGAA CAGCAACAAG AAAGATCCCN
GTGTGLAAAT GAACACTGGT TGGTAAAA

SEO ID NO:728: (Length of Sequence = 305 Nucleotides)

TGITTIATTA TAATCITATA CAGICIACAT AAATTIGAAC TIGIATTIAT TIGGGITCAG TIATAACATA GCATAATAAA
AATCAAAGCA CIGGICCICT GAAATAAAGC AGGCAATCAC CATTCAATAA ACACACITGA TITATTITIGI ATAAAAAGGGT
TAAGITTACA ACIAAACITT TATAAAAANGI TIAGCATGAA TAAGIACATC ATTACACITT TGAATGCAGA AATAGACATC
TCIGCCACTA TACAAGAAAA CICTAATTAA AGAGITCACA AGGITTCACT CAAATAGATA TATIT

SEO ID NO:729: (Length of Sequence = 383 Nucleotides)

CAGACLATTI ATTITICIAT TITICCATGAA GAAGGAGAGG GACAATTITA GATICACCAG TGIGCAGGAC AAATTCITAC
TTAACCTATA GAGGAGCAAA CITICTICAA ACACATTACC AATACAATTG TAATACTAAG AATCAATACC ATAGTICTCG
ATGIACCATG ACTACAAATT GTCACAGTAG ATTITGGATG ACTITACCAT AGCCACACTT AATGAATTAT TATITATATT
NCIATTIGTA CITTAATAAA ACTATATTIT AAACTITAAA ATTGICATTI AAATTACTAA AGAAAATGAG TAGTICCCAT
AATGAATCCA TAATGITANG AATTIGCTIT AGCAAATGAG GACTATATTC ACCTANGCTT TIG

SEO ID NO:730: (Length of Sequence = 311 Nucleotides)

CTCTTTATT CCTTIAACTG CTTAACAAAA GAAAGAGTCT CCAAAGTTTA AAAAACCTTT GAAAAATATA CAGCTTGATA
TTATTTACAT AAAATATGAN TCCAGGTTCC AATATCAAAC AAACATTGCT ATGTCAGAAA CACAGTGGAA GGCAGGAACG
TAACTCACTG CCTTTTAGAT GCAAAGACTA ATAGACACGT TCTCCNATCT CGACTATCTT NGTTACCTGT TATCCTCANA
ACATAAATTA TTANGGCACC TGNGAGGTTG GATGACTACC GAAAATGGNC TTCATACCTT CTGTATGATT A

SEO D NO:731: (Length of Sequence = 349 Nucleotides)

AGGGA-ATGC ACAGAATTCT ACTAAAATAA CAGCAAAATA AGAGAGCATG AATTACATAT CAAATTATTT AAAGCAAATA
ATTTA-CAAA TTTCTGGAAC AGACAGAAAG CAGATGAGTC TACCAAGAAG GATAATAAAC AATGACACCA GAGAAAAACC
ACAACCTGAA AACTTAAGAA AACTGCCTAA GAGGTGTGAG CCAGAGCTCC CAGGAGCCCT ACAGTGCTCC AAGCTCAGAA
CTGGCAAGTA TCAAAGTCAA GAATGCTATG GGGTAGCTAG GCCTCTTGAC TTTCTCTTCT CTCTCCATTC ATAGACAAGA
AAGCA-ATCT ACCTTTAGGT GGCCTAGAA

SEQ ID NO:732: (Length of Sequence = 370 Nucleotides)

AAATTETETC CTCTAGCCTA GAAGCAATCA AACTCCAACT GGTGCTGCTG ACTGANCTAC GCATGGATAC GCCATTCTTC
TGAGGCCCCT TAGACCAACC CCAGGAGGAG CCCTGACTTC TGTTCCCCCAT TINATGCCCC TTTTCAAGCA GGAAGTAGCC
AGAAACAGTC ATTGCCCAAA ACCACCTAAC AGCAGTTGGG GTGACGTCTC CACAGGGGGG AAATGTTATA GGAGTTATTA
AGAAACTATC TTAGGCCAGAT AGAGAGCAAA AGGGGTCCTT GGGAAATTTT TGTTTCTTTT AAAGTAGCTG CAGAAATGTT
TCTTTCTTAG CAGGAAAAGC CCCAGCTCTT TAAAGCTGGG GCCAGCAATC

SEQ D NO:733: (Length of Sequence = 357 Nucleotides)

TTITITGGIG TGIAGAGACA AGGICITGCI ATGITACTAA GGCIAGAGAT CCITTIAAAA TGICITICIG CIAGGITGIT GGGCCATCAC CICICCITIG THICCITCIC CICICCCAGC TICICTGGAT TCCATCIGIT TCITATACIG AGAAGITTIGC

TACCIAGCIA GCCCTCAACC TCTTTGTTT ATGAATGGAA AGGCTGGGAC CCAGACAGGG CAAGTGACTC ACCCAGTGTC ACAGAGCTGT TAAATGGCAG AGCATGATTG AATCGGGCCCA TGACTACTTT CCTACATGAC ATATTGAAAC CAGTTTGAGG CCTCGGTTTC CTCTCTAGCA AAACAGAGAT ACTAATG

#### SEQ ID NO:734: (Length of Sequence = 374 Nucleotides)

TGGIGAAAGA AGAGAAGGAA ACCTTGGTCT GCATGGCACT TGGTACTTTT GTATTGCCTC CATGCCCTCC ACTGCAGCTC
CTGCCCTGCT CTGTGTGCAT CCCTCATGAG ACTCAAGACA GATAACCTCT CCTTGCCCTT TCATGTCCCA GCCCTGCNTC
TTGGACTCAA CCATCCATTG CATCCCCATG GAGGATTCTG CCAGTCCTCA GGACTCAGGA GCAACCCAAG GATGTCCCAG
GGTCACAGGA AGACTTGTTG AGGGGACCCA CAGGGGTGCC CACAAATTAT CAGTCCATGG AGAAAAGTAG AGAGGGAGGC
TCAAGGACCT CAGCACGTAA GGGACATTTT GAATTCTACA AGTCACGGTG GGAT

#### SEQ ID NO:735: (Length of Sequence = 348 Nucleotides)

### SEO ID NO:736: (Length of Sequence = Mucleotides)

ACACTOCTGA COTCAGGCAA TOCTOCCACC TOAGCOTOCC AAGGTGCTGG GATTACAGGC ATGAGCCACT GOGCCCAGCC
TACACACACT CITAATAGAA GAAATGAATA ATCAAAAAAT ATTATTGTTG GAAAAAATGT TTGAATCTTA TITTAAAAAAT
AATTAACGNT TTCAATAGGC ATGTTGAACC TTTTTTTCGGC TACTGTTTTC AGCAATTGCA GTTGAATGAG TACAAAAATGC
ACCACAGAAT AGAGACTGCT ATCTACCCAA ATATTGCTGG TTGTTGAATC CATGGTAGGG AATTINCATG TATTGTTACA
ACCACGCTATA AATACATCCC AAAATATGTG TAGAGCTAAA ATAGATG

367

### SEQ ID NO:737: (Length of Sequence = 243 Nucleotides)

TTAATCATTC AAACTTCATT TTATACAACG AGTGCATACA CCACTGGGGG AGTNTCTGAC TGATGCGTGG GAGGGCGGGC GGGGATGTCT NCAGCTATGA GTAGGGAGGA GGCGGGGAAG CCCTGGGTGC TTCCTCTCCT CGACTGACCG CTGTGTGTTC GTCCCCAGAG GAAGAGCGGN NGGCAGTCAG CCCCGGGGG GATGGCACAN TGGAGAGACG GACCTGCAGA AGTGGTGGCC AAG

### SEQ ID NO:738: (Length of Sequence = 358 Nucleotides)

CGAGTCAGAG CTGGACAGCG GCGATGCCAT CTTTACATGG CCAGACCGAG AGAAGGGCAA ACTCCTGCAT GGTCAGAATG
GCTCTGTACC CAACGGGCAG ACCCCTCTNA AGGCCAGGAG CCCGCGGGAG GAGATCCTGT AGCCACCTGG TCTGTCTCCT
CAGGCAGGG CCCAGCACAC TNCCCGGCCA GTCCTCCTAC CTCCCGAGTN TGCGGGCAGC TNCTGTCCCA GCATCTGCTG
GTCATTTCGC CCTGACAGTC CCAACCAGAA CCCCTNGGGA CTTGAATCCA GAGANGTCCT CCAGGNAACC CCTCAACGAA
GCTGTGAAAT GAAGAGGTTT CCTCTTTAAA ACTGGTTT

#### SEO ID NO:739: (Length of Sequence = 400 Nucleotides)

CATTICTOGC CAGGCACGGT GGCTCATGCC TGTAATCCCA GCACTITTOGG AGGCCGAGGC AGGCGGATCA CGAGGTCAGG AGATGGTCTA GACCATCCTG GCTAACACAG TGAAACCCTG TCTCTACTAA AAATACAAAA AATTAGCTGG GCGTGGTGGC GOGTTAGTAT TYCCTTAAAT AACAGGTTAC AATAGAAAGA TACTGCCTGG AAGITATCCT TTTCATTTTG GITCATTTTC
AGITTTTGTT TATGATTTAC ATAGCTGTTT AATTCATTTG CTTATAGTAC AATCCTGCCA TAAAGTATTA AAGCACAAGA
TACCTGTTAT TCCCTTCAAC ATCTGCATTT TTTCAAGNIT TTATACTCTA TATCCACAGT ATGTCAGCAG TTCTTGACTG

SEQ ID NO:740: (Length of Sequence = 374 Nucleotides)

ATCCTCAGAT TCACCAAGGT TGAAATGAAA TAAAAAATGG TAAGGCAGC CAGACAGAAA GGTCAGGTTA CCCACAAAGG
GAAGCCCATC AGACTAACAG CAGCTCTCTC GGCAGAAACC CTACAAGCCA GAAGAGAGTG GGAGCCAATA TTCAACATTC
TTAAAAGAAAA GANTITICAA CCCAGANTIT CATATTCAGC CAAACTAAGC TTCATAAGTG AAGGAGANAT AAAATCCTTT
ACAGNCAAGC AAATGCTGAG GGATTCTGTC ACTNCCAGAC CTGCCTTACA AGAGGTCCTG AAAGGANGCA CTAAACATGG
AAAGGGNATA ACTGGTACCA GNCACTGCAA AAACATACCA AAATTGTAAA GGGA

SEO ID NO:741: (Length of Sequence = 290 Nucleotides)

AATTATTICA TAATAATGTA ATAAACATIC ATGAACATAC CCTATCAAGC AAGAGCTAGA ACCTIGGCAA TCATTTCCTT
GACTCCTCCA GITTGTGGCT ATCATGATAT TCAGCCCCAA GITCATCATT TCTGITTTIN CITCIATACA GGITTCTTAT
ATGTATTTCT AAAAATCATT GGITATTTCA TCTTTGTAAA AAGTCATTGT NCTATTTTCC CCACTAGTTC TACATTGCAT
TCATATTGTT GIGGGTTGTG GTAATTCATT NATTTTGACT GCTGTATAAT

SEO ID NO:742: (Length of Sequence = 274 Nucleotides)

TTAAGAGGAA AAGTATCTIT AGGAATTINI TICTATAGAG TICTICATTA ACATITATAC GAGITITITIG CIGAGICAGA
TGGACAGITG GGITCIGATG CITTINCCTT CCCGCCTGCC AGGCTGGCCC AGGCAGIGCT CCCACCANIC TATGAGCGIN
TCCGGGGCCG NGGATCIGGG CAGCATCCAT GGIGCCGGGG CCATCCCCAG CGGNACCACA AGGINGCAGC GITCHICCAC
GAAANACCGN CITTCCGCTC TGCTTCCCCCA AAGG

SEO ID NO:743: (Length of Sequence = 398 Nucleotides)

TIGCTITICCA GITATCIGGA ACTOCTOGIG CICTITICAGG AGCITCIGGG TGIGCIGIAT ACTGGAGCCC GIGGAGGIGI GIGIGGAAAG GIAGAACTOG CCATTGICAT GGATCCATTC CAAAGCCTGC TIGGCACTCC TCTCAAAGAC CACGIACTGC TGACACTGGT CCAGCCGTCT CITCCTCATG GICCAGIAAT GCAATACCCT GITCTCCCGT TGGAAGAGTT CATTCAAGAT ATTTTTCACT TGCTGITCAG GAGCTITGAT GIGCGICACC ATTCCTGGCA TGITCACGCT TGITCCTGTG CAGGIATITC AGGAAGACGT CIGCATINCT CCGAGCAAGN GGIGCAAGCC TICAGGAATG CCTCCTTINC TNCAGGGTGC GGITTICA

SEO ID NO:744: (Length of Sequence = 359 Nucleotides)

TOCGACAGAG TCTTGCACTG TCACCTGGGC TGGAGTGCAG TGGTGCAATC TCAGCTCACT GCAACCTCTG CCTTCCGGGT
TCAAGCCATT CTCCTGCCTC AGCCTCCCAG GTAGCTGGGA TTACAGGCAC CTGCCACCAT GCCCAGCTAA CTTTTTGTAT
TGTTTTTTT AGTAGAGAGTG GGGTTTCACT ATGTTGGCCA GGCTGGTCTC AAACTCCTGA CCTCGTGATC TGTGCGCCTN
GGCCCCCCAA AGTTCTGGGA GTACAGGGGT GAACCACCGN GNCCGGCTGG GGCTGCTTAT TTAAATCCCC TAGAAAGAGG
GATTCTNCAG CTACACCACA CCCTTAACTT NGAAGGACC

SEO ID NO:745: (Length of Sequence = 361 Nucleotides)

CCCTTAATTA AAAGTTTTAT TTTTAAAAAA CGTAACAGAC CACTCTAAGA AACTTTGGCA TTCAAAGCAG TAGTTACTGT
TATTTGCTAA CTCTGAAAAA AAAATTTTNC CCCTCACAAA CAACCGGCAA ACTCCTGCCA CTTCCTAGCT TGGTGGCTGC

CAGCETECAC TECAGEGAAA COGTEGETEG AGGEATAGGA AGGCCCTCAC GCTCCCAACC CACGGAGAAA NTGCAGATGG TEACAAGCTG CATCTEGACT CCAGGNTGTA TCTGACAAAG AGGGAGATGG TNTCCTCCNT CCCCTNCACC AGCTCCACTT TINCTGCTGA AGAAACAGAG ATGTGGAGGC AGGCGTGACC T

# SEO ID NO:746: (Length of Sequence = 285 Nucleotides)

GIGITITIAT TIMIACCTAC AAAAAGAAAA CAAGATGATG GIATCAAAAG GACAATITAC AAACTAAGAA TAGTAACATA GCITICAGCA TCCTGIGCCT GAACATCACA CATCTACAAG TCTTTCAAGA CTTAATGCAA CAGGAATNIG TCTGGAGACC AGCAAGANCA TCAATAGAGA GCACTCATCC CAAGCAAAAG CCACTAACCT TITAGATGAG AAGTCCACAC AACGGATINI TAGGGGAGGA TITIGGGAGAA GCAGCCCATT TGCTTAATAC ATTGG

# SEQ ID NO:747: (Length of Sequence = 302 Nucleotides)

CAATGCAGIT TIAGAGIGCT CATICITICA ACTIATITGA CAAATATITA CIGAATGICT GCCATAAGGC AGTAAAGGCA CAGAATGACT CAAAGCCITT TINCCCITAT GGGGIGIAAT INCIAGIGGI GGAGACAGAC AATGAGCAAG TAAACAATCA ATCGGCTAAT GATAACTACT GIGAAGAAAA TAAAGCAGCN CAAGGGAATA GAGTATGCCA TCATTAAGAC TGGITAGGGA AAGCITCTIT GAAGACATGG CAGCIATIGA AAACCTGACT GATACAAAGA AGCAAGTCAT GT

# SEO ID NO:748: (Length of Sequence = 346 Nucleotides)

GAGACCAGCC TGGGCAACAC ACTGAAACCC TCCTCTCTAA AAAGAAGAAA AAAATAAGAG TTTTGAGTTT TTCCAAAGAA
GAATGCTCAG TACGTTTGIN ...CTATCAGA AAGAAGAATC TGGAGGTCCT GACGTGTAAA CAGAGTTGTG GGTACCATCT
CACCAGAATT GCTGCCCTGA AGCCAAAAGGA CTGAGCTGCT CAGATCTGGA AGTAATCTGA GCCCCCATTT CCAAGAAGAG
AATTGCAGAA TTTTATAGGA AGAAGGGACC TGATCCCTGT CAATGGAAGC ATTTTAAAAT TTTTAACTGA AGTTCCAGGA
GCATACAAAA AGCCAGGNAA TTTACC

# SEQ ID NO:749: (Length of Sequence = 325 Nucleotides)

CTAAACTTA TITICAAAAG CITAAGGCCC AAATACAAAC TGAGGTCITC CITCCTAACA AATTAATACT AAAATGAAAC AGCTITINIT GIGICCTTAA GACAAAATAA GGAAGGAAAA CGIAGCIGCA GITGICCACG ATGGATATIG GITCTITIAAA ATATATCIGA AAGIAGTAGT CAGAATGANI TATGGITGGA AAACTGAGGN ATCITCTGGT TGCAGGTGCA AAGIGACTIT MITTATTCTT GICTCAGTCT CCTIGATAGC CACTTCACTC TGCTACTACT CAACTTTCTC CTAAAAAATAC TTCATCTATT TTCAG

# SEQ ID NO:750: (Length of Sequence = 341 Mucleotides)

TGTATTTINA GTAGAGAAGG GGTTTCGCCA AGTTGGNCAG GCTGGTCTCG AACTCCTGAT CTCAGGAGAT CGGCCTGCCT CGGCCTCCCA AAATGCTGGG ATTATAGGCG TGACACTGTC TCTGGTTTAA GAGAACCATG GGCTGAGATA TINAGGAATT CTCCAGGCCA CGAATCTTGG GGCATGCAGC CTCTTCCGTA CCCCACAGCA TCTNGGGGAG CTGGTGTGCT GATGGGGTCA GCTCTCCCAG CTGCCTGGAA AATTCTCAGA CACTCCCTAA GAGGACATCT CCACCCCTNC CACTCTNACG TCACTGCTTT CTAACATTGC TCATTTGTTT G

# SEQ ID NO:751: (Length of Sequence = 377 Nucleotides)

TTTTTGAGA CGGAGCITMG CTCTGTCACC CAGGCTGGAG TGCAGTAAGC CCATCTCTGC TCACTGCAAG CTTACACCAT TCTCCTGCCT CAGCTTCCCA AGTAGCTGGG ACCACAGATG CCCGCCACCA TGCCCGGCTA ATTTTTTGTG TGTGTGTTT TAGTAGAGAT GGGGTTTCAC CATGTTAGCC AGGATGGTCT GGCCCTCCAG CTTCCTCTGA GTCCCTTCAT AAACATTTGT TTATCTTGTA AAATAATTIG TTCCATTTCT AATTAGTACA TAATGAGAGA GGCAGTGTGA TGGTTTGTGC CTAAGACCTT
TCTTGCCAAG ACTTCCAAAG CCAAAAACTT CAACAGTTTT CCTAGATGAC TAGACAG

SEQ ID NO:752: (Length of Sequence = 359 Nucleotides)

AAGTCAGGCG TTCCTGGGGC AGCTGTCCTG TGAAGTTGGT GGGACGTGCT ACCCTGGGCC AGCTCCAGGT GAGCNIGGCT
TCGGTGGTCC CCGTGGGCTC CTNAGTGGCG AGGGTGAGGC CTGGCACTGG GCCTCTAACT GGCCCCGTGG CCCTGCAGTC
TTTNGTGCTG GTGTCCCGCT TGCCCTTTNT CCGGCTGTTC CAAGCCGCTGC TAAGCCTCAT CGNCCCCNAG TACTTTNACA
ANCTGGCGCC CTGNCTGGAA GCAGGTGAGT GGCCATCANT CGTGGTCATC TTGGNCTCAT NATCCCAGCT TTGGCCCCTG
GTTGGGCTCG GCAAGCAGCT TCTCCTTGGG GAGGGTCCT

SEQ ID NO:753: (Length of Sequence = Nucleotides)

AGCTICAACT TEGAAAGAAG GATGATECAG TITTEGGCCC TCCGGCCATC AATNACCGAC AGCNCTITGA CCTTGCGGGA
AGCCAGGTAT ATGINITCAG TGGAGCCCAG CTCTTTCTGG TGCCTCTGGT AGGCTGAAAA CATCTTTTCA AAATCCTCTA
GGTCCAGGNT CCGAAATACC TGCATGTCAT CAATCTCATT CCATACGGTG CCAGGGACAC GCTCCTCATT CAGCTTCACC
CAGTTGAAGG ACTTCAGTGG GTGAGAAGGC TGGGGGACAC GCTTTTTCCT GAGTGGGACG

SEQ ID NO:754: (Length of Sequence = 342 Nucleotides)

CTGTTGAAGT GCAGGTTTGA TCCAGCCAGT ATAGAACTAG CTCTGTAGGG GTGAGGAGGA CTGTNCTGTG TATCATCCTT
GATTGTNTTC CTTCAAGGAG CATTGCACTG TAAGTACATC AGAATGACAA ATTGATGAAC TGCAACAGTA TCTTTTTGTC
AATGTTCCAC ATAATGCAAA TGCCATACGT TGTGTGAATA TTATGTTGGA ATACAGTGCT GATATCTTGG AAAACCATAA
CTGCCTCTTA ATTTAACATA GAGTAATACA TAGINCTGTA TTTTTTTTAA AGTGAGCTNT AATGGGAAAG TATTTTNAT
ATGCTTTAGC TATAGCTAAA GG

SEO ID NO:755: (Length of Sequence = 321 Nucleotides)

CATTGCCATC TICTCAGICC TICTCCCTIT CTITCCAAGT AGITTACGGC CCTAGGGCGA AGGTGGCTIT TATTTCCTCT
CTTGGGGAAG GAGGGGGGG GAGCTTTCCC AAGCACATCA ACCTAAGGAA GGGGTGGTTG CNCCCCCAGC AGCGAGGGGC
TGGAACTGCT GATCATTCGG AAGGAAGGGT TCGTTCTTGT CCACTTCCTG GCCCTTGGCT GCAAGGGTGT GCTTNGCAGG
GGTCACTCCC CTTGGGGGTG GCAGCTCCTG CATCAGINGA GGGCACAAGG AGGTATCTGC TGGTGTTCAC GAAGAGGAGG
G

SEO ID NO:756: (Length of Sequence = 368 Nucleotides)

TOGCATOGIT GCATGINCCT GTAATCTCAG CTACTTOGAG GCTGAGGCAG GAGAATTGCT TGAACCTGGG AGGTGGAGTT
TGCAGTGAGC CAAGATCGCA CCACTGCACT CTAGCCTGGG TGACCGAGCA AGATTCATTT TCAAAATAAA TAAATAAATA
AATGAGAAAA AAATATAGAT ATAGTAAAGG GAACAATTAC ATTCTACAAT ATTTTAGCAG AAGTAAATAT GGTTTAATTC
AATGGAAACA GCTCTGCTCT ATNGAAAATT CACAAATATT AAAAATAAAC ACACTCTACA TTAAACCTCT GAGCACTAGA
NGCTTACCTA CTTATTCATA GGGCTCACAT ACTGTAAGGG GGGTAAAT

SEO ID NO:757: (Length of Sequence = 339 Nucleotides)

CTTCCACTGC CAGGITATCG TCCCGGGAAG CCCCCCACCC CCTCGNTTC CTCCTCCGCT TTCCCTAACC CGTCTCGCGG GGGCATCTAC GNCTCGTCCT CGNCCTCCTC CINCTCGAAC TCCCCTTGTT CGTCGGCCGT GGCGTCCTGG TACTGCTGGT ACTCGGACAC CAGGICGTTC ATGTTGCTCT CGGCCTCGGT GAACTCCATC TCGTCCATGC CCTCNNCCGT NTACCAGTGC AGGAAGGCCT TTCGNCGGAA CATGGCCGTG AACTGCTCGG AGATGCGCTT NAACAGNTCC TGGGATGGCC GTGCTGTTTC CGATGAAGGT GGCCGACAT SEO ID NO:758: (Length of Sequence = 356 Nucleotides)

TTTTTTTGIA TTTCTTTGT ATATGGGTTA AATGITTCCG TTATATTTCC TAATTGGCTA TTGCTCGTAT AAATAGATGT
GGTTTTAGGC ACATATTTTA TATCTGGCTC CTATACTAAA AATCITTTAT CATTTCCAAC AGITTTCAGT TATGCTCTTG
GGTTTGAAGG TAGACAATAA TGTCATCTAC ACATAATGAT ACINCTGTTT TCNCTTTTTA AATGCTTATA GCTCTTNAT
TTTTATTGCT TTGCTTGTGC TATAAATNCT AGAATGAAGT TAAATAATCA TAGCAGATAT CCTTTTTCCT GATTTAATTA
TAATGCTCCT GAAATTTTAT TAAGTATGAT GACTGT

### SEO ID NO:759: (Length of Sequence = 333 Mucleotides)

GCCATGTGGG GGCGGAGGG CGGTGGGGTC GGGCGGGGG GACGGTCAAA GACTTCATAA ATAAGAGGCG GGTCCCAGAC CCNCAAATTT GTCAACATGT CTTAAATAGG TGCATTATTT AAATCTTATG TACAACAAGA ATCACTTTGC ATAGCAATGG TGAGGACACA GGACGGGTGC AGTGATGTGA CTGGGTCTTC TTGTCCCAAG GGCGGGGGC GAGTTCGCAG CTCAGCTCGG AGCCTCTAGG AAGAAAGCAT CCTTCGTCCG GCCCGCAATN GTGGCATCGG AGTTGACTTT TCCCACACGA CGGCATCAAN CACAAAGGCA AAG

## SEQ ID NO:760: (Length of Sequence = 311 Nucleotides)

### SEO ID NO:761: (Length of Sequence = 314 Nucleotides)

TTTTTTTCT TTTTTTAAG AGACAGGGTC TCACTCTCTT TCCCAGGCTG GAGTGCAGTG GCAACGATCA TAGCTCACTG CATCCTCGAA CTCCTGGCCC CAAGGGATCC TCCCACTTTG GCCTCCCAAA GCACTGAGAT TGCAGGCGTG AGACACCTCA CCTGGCTTGT CTGAGAACAT CTTTTAAAAA AAATCCCTTC TCTTGGGTTT TCTGTTACCC ATATGTCTAC TCAATTTGGT TGTCTCAGCT TTGTTGTTGT AATGCCAAAAG CAGCCATAGA CANTACATGC ATTGAATGAG TGTAGTGCAT TCCA

# SEO ID NO:762: (Length of Sequence = 319 Nucleotides)

ATAAAGGIAT ATAAAAGIIG AAATTAAAAG ACACATATCA TGAAAATACT AACAAAAAGC TATAATAGCT ATATTAATAT CAGGIAAAAT AGACIITAGG ACAAAAGCAT TATTAAGGAA GGGAAAGIIG CIATAATAAT AAAAGGIIGA GITAATCAAA AAGAITATAAT AGIITITAAAC ATTAIGCATA TAATTAANIT CCTCAAAAAAT AGACAAAGCA CATATIGATA CITAAGGAAG AAATTGATAA ATCCATCACC ACAGIGGGAA ATTAGGAAGT TICTGTACAC CTCTITCACT TGTTGATAGG TCAAATGGA

## SEO ID NO:763: (Length of Sequence = 369 Nucleotides)

## SEO ID NO:764: (Length of Sequence = 381 Nucleotides)

COCCITOGAG CAAGACGTGG AAAAAGCCAC GAATGAGTAC AACACTACAG AAGATTGGAG TCTTATTATG GACATATGTG

ACAAAGITGG AAGIACTCCT AATGGAGCGA AAGATTGCCT AAAAGCCATA ATGAAAAGGG TAAATCATAA GGITCCACAT GITGCTCTGC AAGCACTAAC TCTTCTTGGG GCTTGTGTGG CAAACINTGG AAAGATATTT CATTTAGAAG TATGTTCCCG TGGATTTTNC AACAGAAGTA CGTGCTGTGA TTAAAAATAA GGGCACATCC TAAAGTATGT G

SEO ID NO:765: (Length of Sequence = 329 Nucleotides)

TTGTCTGCTT GATGCAGGAG CTGAGGAGCT GCACAGAAGG TTAAAAGAGC TGTAACACAA ACAGGGCTGC AACATGCCCC
TTGCTCCCCCA CAGGGAGAGA AGAGCTCTGG CCCTCGGAGA AGCCCAGACC TGGGAGCTCC TTGAGCCCGG GCTGTGACTC
CCTCTTTGGG GCCCTGGTTG GCGTCACTGC ATTCGCCAGGT GCCACTGTTG GAAGCTGCTT GTNATGCGCC TGGTCCAGGG
GGAAGCTGTT TGTTGTGTGC CTGGTCCAGC CACCTCATGG AGAGCCTGTG CTGGCACCTG GGAGCTGCCC AACCTGGGCA
GCAAGCTTT

SEQ ID NO:766: (Length of Sequence = 321 Nucleotides)

GCAGTIGGCAG GTAGATITTA TIGGCCIGGG ACACACAGGG GATACCCICA CCCACGATGG GGTGGGGGGT GTGGTGTTGA
AGATATAATC INATGGICAC TIGTGGTAGA ATCCCGGGTT CTGGCTGTNIT TGGATGAAGG GGAGCCGAGG GCCAGGTTGG
CTGGTAGCTG CAAACCCGAC TITTCCTGCTG GCTGCATCTG CACAGGGAGC TGGGGGGGAAG CAAGGAGTCC AGGGGCTGGA
TGCAGAGCTT GAGTGGGAGA AGCCAGTCTG CTGGTTAGCA TGINCCATCT GCTTTINCAA GGNCAGGGCA CCACCAGGCT
T

SEO ID NO:767: (Length of Sequence = 313 Nucleotides)

ACCECCCCIC TAGTICACIA TICTIGICCCC GGIACCCAGG GCATCATAGA CACTCAACAA CCATTCGTIG AATATGCAAT
TGGATGAAAT GAATAAACGA CCAGAGGAAT AATCCAGACA GAGCAGCAGT GGCCAAGGGA AGGGAGGATT GATTTATGGG
AGAAAATTAG GGGAATGAAA TCCATAGAAA GGGTTTGCCT AAGINAGAGT GATGACINGA GCCAGAAGAC ACCCGGGGGA
GAGGAATTNI TICCACATGGT ACGAAAACGG GAGGAGGGA AGAGGTGGGG TGGTGGAGTN CAGCCTCGAG GCT

<u>SEO ID NO:768:</u> (Length of Sequence = 372 Nucleotides)

TCTCTTCTCT GCCTGTTTAT ATTCTGCACG TCCTTAGTAA CCCCTGTGGC CCACTTCTTA CTTAGGTCTC TCCTAACATG
TATCTATGAC ACATTGATCC CTAACAGCTA TGATTCTNCT TATACTTTTN CAGTAATTTA AATTTTATCA TTCTACTGCT
TGTTCAATAC ATCTCTCTAT GTAAATCTTG ACTCCATAAT GAGGTTTTTA ACTTCGAAGG GGTTGGAAGT TATCTGCTGC
CTTGGTACCC CCCCGCCATT ACACAAGAGT ACATTTTAAG CACATTACAC CTGAGTGATT GTNGTAAAAC ACAGATGCAA
TCTTTCCACC ATCCTCTAGG AATTCTTCTG TGGGCTTTCC ATTGGGTTAC CC

SEQ\_ID\_NO:769: (Length of Sequence = 321 Nucleotides)

GCAGCCAGAG CTCCAAGGCT CCCCGGGGGC ACGTGACCGC CGAGGAGGCA GCAGCGCCTT CCCCCGGGAA GGCCAACGGC
ATGGAGAATG GCCACGTGAA AAGCAATGGA GACTTATCCC CCAAGGGTGA AGGGGAGTCG CCCCTGTGA ACGGAACAGA
TGAGGCAGCC GGGGCCACTN GCGATGCCAT CGAGCCAGCA CCCCCTAGCC AGGGTGCTGA GGCCAAGGGG GAGGTCCCCC
CCAAGGAGAC CCCCAAGAAG AAGAAGAAAT TNTNTTTCAA GAAGCCTTTC AAATTGAGCG GCCTGTCCTT CAAGAGAAAT
C

SEO ID NO:770: (Length of Sequence = 364 Nucleotides)

TTAAATCAGG AAATGIGATG CCTCCATCIA TGGTTTTTGA AAGICATCAG CCAGAGCTAA GGTAATGAGG ATTCCCTCCT
TCATGTTCAT ATGTCTTTAC ACTGTGCACA ACTGTCCCTA AAAAAACAAA CCCCTGGCCCA ATTTCTCCAG GCTTATCGTC
TCCCCCGGTTT CAGTTACATT TCAGCTTAGC ATTTTCAAAA TAACAATTTG TTCTTGGCAG CCTGTCTATA TATTTNATTT

ACCTCTCTG TTATCCCCAC TTTTCATGCT CTATGTCCCA TAGGCAATTT GACAAAGACT GCTTTGACAA AGGATTCCTA
GACTTCTATC TCTACCTCTC ATCTGACTTG GGCGGAGGAT TAGG

#### SEQ ID NO:771: (Length of Sequence = 357 Nucleotides)

CAGCTCACTG CAACCTCCAC CTCACAGGIT CAAGGATTC CTTGCCTCAN CTTCCCAAGT AGCTGGGACT ACCGGTGCAC
ACCACCATGT CCAGCTAATT TITGTATTIT TNATTAGAGA CAGGGTTCA CTATATGTTG GCCAGGCTGG TCTCAAACTC
CTGACCTCAA GTGATCCGCC CACCTCGGCG TCCCAAAATG CTGGGATTAC AGGTGTGAGC CACCATGCCC GGCCTAAATT
ATAGCTATTT TAGAATGTTG AAAGTAGTAT TATGTGATTT CAGTTTGCCA TAAATTTTTC ATATGGTTAC TAATTATTTC
TMTTTTTGTG GATATATCT: CTGGAAATCT ATTGAGG

#### SEQ ID NO:772: (Length of Sequence = 359 Nucleotides)

CCTCTCAGGA AAACACCTAG ACATTATGTA ATGTATTTGA AGATTAATGT ACCCTTTAAC CAGCAGTTGT GTACCTAGGT
ACAAACTTTG CAAGCACACA CGCATGTNTG TNCCAAAAAG CACATACAAA AACACTCCTA ACAGCATTAT TTGTAATAAT
AAAATATAAG AAATTACCTA AATATCCATC GACTGCCATT GGTAGTATGG TTATACAATG GAATTCTACA CAGCAATGAA
AAGGAGCTAG AGCTACATGC AACAACATGG ATACAACTCA CAAACGTAAG ACTTAGTGGG AAAANGCTAG ACACAAAGTT
AACACCTTCT ATATGTGGGT TCCAGTTATA TAAAACCCA

#### SEO ID NO:773: (Length of Sequence = 361 Nucleotides)

GAGCCTACGG CAGAAAAAGA AACATCTICC TATAAAAACT AGACAGAATA ATTCTCAGAA TCTGCTTTGC GATGTGTGCG
TTCAACCCAC AGAGTAAAAC TTTNCTTTTG ATAGAGCAGT TTTGAAACAC TCTTTTTGTA GTATTTNCAT GTGTATATTT
AGAGCGCCTT GAAGCCTACG CTAGAAATGG AAATATCTCC CCATAAAACC AAGACAGAAG CAATCTCAGA AACTAATGTG
TGATGGCTGC ATTCCACACA CACGGTGGAC CATTTCTCTT GATAGAGCAG TTTTGAAACA CTCTTTCTGT AGAATCTGCA
AGTGGGATAA TTGGGACCTC CTAGAGGGCC TTCGTTGGAA C

### SEO ID NO:774: (Length of Sequence = 387 Nucleotides)

GTTTCGCTCT TGTTGCCCAG GCTGGAGTGC AATGGCGCAA TCTCGACTCA CCACAACCTC CGCCTCCCAG GTTCAAGCAA
TTCTCCTGCC TCAGCCTCCC GAGTAGCTGG GATTACAGGC ATGCGCCACT ACCCCAGCTA ATTTTGTATT TTNAGTAGAG
ATGGGGTTTC TCCATGTTGG TCAGGCTGGT CTTGAACTCC TGACCTCAGG TGATCCGCCT GCCTCGGCCT CCCAAAGTGC
TGGGATTACA GGCATAAGCC ACTGCGCCCA GCCAGAAGAT GCATGATTTC TTAGGATCAT ATGCTGTTTG TAGCCATAAG
GTAAATCATG TCTCTTCCAA TCATGACTTT TGGGAACTCC CTGAATAATA AAAATGAGAG TTGAGAT

# SEO ID NO:775: (Length of Sequence = 401 Nucleotides)

GAATTINICI TICIGCATCG TICIGICATA AAAAGGGGTA CIACIATAGA ATAGAATGCA GGCTTAGGAC CCCCGTAAGC
TCACIGITCA ACCCAGCCCA GCAAACIGGI CAGITATAAA TITINCIGCA GGICCCIGAA ACAACAACAA AAAACIGGAT
GAGGITTCCC TCCCATCITG TITITATGTCC TIGGGAGCIT GACCTTATAA CCATACGGCG GTACTITINC TIGGICTCTG
CCATCCAGGG AACCAGAATT TGGGGGGTTA TGTCATAGIT AGCTCTAAAA ATTATCTTGA GCAGTTAAAA GCCTTTGCAA
GCTTAAAAATT GACTGCTGTA GGNICCTTCT GGGGAAGGAG CAATGGGAAA CCTINCCAAA GCTTATAGCT CANCCAGCTG

SEQ ID NO:776: (Length of Sequence = 345 Nucleotides)

AACACTEGET AAGCACTITE TATEINCIGE GCACTCIECT AGAGATAATE TEICIGGAAT TOGIGGGITC TIGGICICAC TGACTICAAG AATGAAGCCG TGGACCCTCG CAGTGAGTGI NACAGCTCTI AAGGTGGCGC GTCTGGAGTC TGCCCTTCT NATGITCAGA TGTGTTCANA GTTTCINCCT TCTGGTGGGT TCGTGGGTCT CGCTGGCTCA GGNGTGAAGC TGCAGACCTT TNCGGTGAGT GTNACAGCTC TTAAGGCNGC GCGTCTGGAG TTGTTCGTNC CTCCCGGTGG GCTCGTGGTC TCGCTGGGCT CAGGAGTGAA GCTGCAGATC TTCGC

SEO ID NO:777: (Length of Sequence = 229 Nucleotides)

ATTGGGGGAA CCCAAGCCCA NIAATGCTAT GGCTGITGCA GACTTGIAGA GGTACTGCCT TCATGGTCTT NGGTAAGATC TGGGAGAATT CCCTGGATTA CCAGGCAGAA ACTCINATTC TCTTGCCTTA CTTCCCCCCA AACAAATNAG TCTCTCTCTC TCTCTGTCTC GAGCTGCCTA GAGCTGAGGG AGGGGGTGAC ACAAGCACAG CTATGTCACC AGGAAGCCA

SEQ ID NO:778: (Length of Sequence = 361 Nucleotides)

SEO ID NO:779: (Length of Sequence = 392 Nucleotides)

CCTAAGATGC CIGGCACAAT CAAAGACCIT TGGIGGCITC CAGCATTIAT AAGGCAGAGI CCAAACACAC ACTTAAGAAT GACTTACTCC TCIGGCGGAC CCCACCATIC CCTCACCCCG CTTTGGCTCT GICCTCTCGT GGAGCTGCCC CTGCCCCTAA ACACIGCCTC CTCTCTACCA ACCCGGACCA TATTTCCCCT CCTCCCCTCA CCAGGICCAG CAGIACCCAC CACGITTGIG GACATCTCCC CAAGGAGCIC TCACGIATCA GAAGCAAGGA GTTAGCCTTC AGCCCCACCT CTTGIGCTTA GGICTACAGT GAGINTCCAG TGATGCTTCC TACCGACTGC TTGGGGGTGC ACAAGAGINA GGCCCACCAAG ATNCCAGCGG AA

<u>SEO ID NO:780:</u> (Length of Sequence = 453 Nucleotides)

CTCTCTATTT TCTCTTTCC TITTGACCTA CCATAGGAGA CAGATTGCTC ATCTCCAAAT TTCTCTGCTG TCTGCCGGANT
GCCTGGTTTT CAACCTTGGT TAGGGTTTGG CTTAGGAATA GCATAATATC CCTTTGTGAG AGGTTAAACA CTTGAGTTAA
ATTTTGGAGG CCAGGTGTGG TGGCTCATGC CTGTAATCCC AGCACTTTGG GGGGCCAAGG TGGCCAGATC ACGAGGTCAG
GAGATCAAGA CCATCCTTGC CAATATGGTG AAAACCCGTC TTTACTAAGA ATACAATAAT TAGCTGGATG TGGTGGCACA
CGCCTGTGGG TCCCAGCTAC TTGGGAGGCT GAGGCGGGAG AATCGCTTGA GNCTGGGGAA GTGGAGGTTG CAGINAGGGT
GAGATCGCGC CACTGCACTN CAGCCTGGGN TGAGAGAGCA AGACTTCCGT TTC

SEO ID NO:781: (Length of Sequence = 306 Nucleotides)

AAGCTACTOG GGAGGCTGAG GTGGGAGAAT CGCTTGAACC TGGGAGACGG AGGTTGCAGA GAGCCGAGAT TGGGCCATCA CACTCCAGCC TGGGCGACAG AGTGAAACTC CATCTCAAAA AAAAAAAAA AGAACCACCA CTNTAACTGA GAAATAGATG MTCCCATTAA CAGTTTAGAA AATGTATATA ACTCTAATCC ACAGAGGTTT ATACTTACAA GCAACTCATG GTTTCCCTTT TAAGGGCCCAC ATGTGGAAAA TTAATCTGAA CAGTTAGTGC AAGGAGGGT CATACCTCAG TGGAAA

SEQ ID NO:782: (Length of Sequence = 443 Nucleotides)

GICTOGGGCT CCTGACCTCA GGTGATCTGC CTGCCTCGGC CTCCCAAAGT GCTGGGACTA CAGGCATGAG CCACTGCACC
TGGCCTAATT CTACATTTTN ATCIACAGCA GACCTTTTAT CATAAAAGAG TTTCTATAAA ACATTTCTCA AAAGAAAATA

TGIATIGACA TICIATITIC TITICICCICC AGATACIATI TITINGGATIT NAAACATACA CAATACITAG GAGACITGIT
TTACICAGAG TGGAAAATIT TNCCAGGGAC AAAGTCAACA CAANGAAAACA AACAACAAAA AATAGCCAGA AAGAGAACAG
TTAAGIGCAG CICGGIGAGI CCCGGCAGIT CCTICCCGGC ACTGGCTCGT CCCTGGGGTT CICAAGGITC CATGCGGCCA
CAGCGICCGT CCACCIGITC CACGNGAGCC ACATGCTGGA ATT

# SEO ID NO:783: (Length of Sequence = 350 Nucleotides)

CATTCAGGCC GGGCACAGTG ACTCATGCTT GIAATCCCAG CATGNITGNA GACATAGCAG TAGGGACTAT CGACAAAGAA
ACACACAGAG GGAAAAAGAA TTCCACATTT GGGAGGCTGA CGCATGAGGT TCACCTGAGG TCAGAAGTTC AAGACAAGCC
TGGGTAACAT GGTAAAACCC CGTCTCCACT AAAAATACAA AANTTAGCTG GGCATGGTGG CCTGGGGCTG CAGTCTCGAC
TACTTGGGAG GCTGAGGCAT GAGAACCTCT TGAACCCGGG AGGTGGAGGT TGCAGTGAGC AGAGGTCATG CTACTCTCAA
GCCTGGGGCA ACAGAGGGAG ACCCTGTCTC

## SEO ID NO:784: (Length of Sequence = 265 Nucleotides)

ATAACTGAAA AATGGAAGAA AATATTTGCA AATTACACAT GTGAAAAGCA GTTAATATCA AAAATATATA AGANACTCAA AGGACTATAC AACAAAAAAC AAATAACCAT GAAAAATAAG CAAAAGATAT ATATAANINA TTINCAAAGA AAGACATACA TATAGCTTGG CAGATAGATG AATATGGCTC AAAGTCAATT ATCATCANGG AAAGGCAAAC CAAAACAACT CTAAGATATA AACTCACTCC TGTTAAANTG TTTAA

# SEO ID NO:785: (Length of Sequence = 363 Nucleotides)

GIAAACNITG AGAAATOGGA TGGITGCTGI GICTGIGIAG AAAGAAGIAG ACATGOGAGA CITTICATIT TGINCIGIAC
TAAGAAAAAT TCITCIGCCI TGGGATCCIG TIGATCIAIG ACCITACCCC CAATCCIGIG CICTCIGAAA CATGIGCTGI
GICCACTCAG GGITAAATGG AAAAAAAAAA AGAAAAATGA AACCAGGAGI TGGCAATTAC TITTITITIT TITTAAAGACA
GAGICTIGCI CIGICACCCA GGCTGAAGIG CAGIGGTGAG ATCITGGCTC ACTGCAACCI CCACCTCCCA AGCTCAAGIG
AATTCICCAT GCCTCAGNCT TICAGAGINA CTGGGGATTA NAA

## SEO ID NO:786: (Length of Sequence = 291 Nucleotides)

AACAACAATC AGCCACAATG TECTITIAAG GATTIAACTG ATAGTAAAGA TAAATGTGAG TNITAAGAAT GGGATTITTA
GACTAGGCTG ACACAAGGGA TCTTCTTINA ATAAGGNICT TGAGCATTTG TNITTITTGGA GCTCATCCTT AAGGGCTGGA
CAGGAAGAAT CCTGTGTTAT GTGTGCATGT TGAGCAATGC AAAAAACACT CTGCCAAATC CTNGATACCA CATGGTCTNG
AGAAATGCAT GAGTGATTTA ACGCACGGNI GGGTGTAGTC ATTATGTTCC T

# SEO ID NO:787: (Length of Sequence = 256 Nucleotides)

TATTICIGIA TAATITINAT TATGACCATA AAAATAACAA TGIAGICAAT AACAATITAA TIGIACATTI TAAAATAATT AAAGIATATA ATTACACIGN TIGIAATAAA AAGIATAAAT GIIAGAGGIG ATGGATACCI TATTIACCCI AATGIAATTA CIACACATTG TAGGCCIGAA TGAAAATATG CCATATAAGG CATAAATATA TACACATACT ATATACCCAC AAATACCAAT AATAAATTIC AATAAG

# <u>SEO ID NO:788:</u> (Length of Sequence = 322 Nucleotides)

GGTCCAATGA AGCTTCAACT CGTTTTCAGC TCAAAGCAGA CGGCAAATCA GCAAAAAGCA AAAATAATGI ATCTTACTGC
ATTACAGACA AAAAAAAAAA AAAAAACAGA GTGAAACTAG ANCTATTTTC AATAGTAGTT TTCTGACAGC TATATAANCA
AATATAGANG ACATTATGGA ATTAGTGATG TGAACGAGAA CTTGTCCATG TATCCTGCCT GCCAGCAAAG GTAGAGATGG

CIGINATATT TGIAATGGIT TACTATGAAG GCIGITCCAT AACCINCAAT ATCCACTGNT CTTGGGIGGT ATACCAAGGA
TA

SEO ID NO:789: (Length of Sequence = 357 Nucleotides)

TCAATGTGGC ATTIGITTIT NITAGAAAAC CCCTTAGTAA GCACTTCTCT AACCCAGAAT AGACACTGGG TATCCTCCAA GAGTCCCATA GCTTTCATTT CATCTTCCAC CCTCTTCTGA GAGGGGGAGG CAGGGGATAG GGGTGGTGTC AGGCAGTCTC CAAAATGCCC CTCCTAGACC CCTGAGAGAAA TTCATGTTGC CAGCAATAAA CCAACAGCAC CTCAGTGGGG CATCANAGGG CCCTCTAGGCC TCAAGGCTAT TGCCAAAAGGG CATTCCTGTT TTATGAGCTT CACGATGGGA ACCAAGGNAG GCTCTCGCAA GACTTCCTTAG GGGCTTCGTGC CTTCAACTTA TGGGCCT

SEO ID NO: 790: (Length of Sequence = 366 Nucleotides)

TGGCCAGGCT GGICTIGAAC TCCTGACCTC ATGATACACC CGCCTTGGCC TCCCAAAGIG CTGGGAATAC AGGCGTGAGC
ACTGCACCCA GCCTTGTGTG ATCTTTTAAA GTACAGTTCC CATAGATTTA CATTAAGAAT AAAAAAGTCA TGACATCTTG
CTTTTATATG GCAGTTTACT CAAGCTTTTT AAAGAAAGAG CATTCATCTT GCTTTTACGT GGITTTAGAA TGTTGAAAAC
CTTTTGNTAA ATCTGAGTAA TTTACTGCAT TINCCATTAA TTCAGCTTAG TTAGACTGCT GCNTCCAGTG CTTTGTTTTG
CTGTCACATA TACCCTAATA TGCTTTTTAA CATATGNCCA AATTCC

SEO ID NO:791: (Length of Sequence = 317 Nucleotides)

AACAACTCCA ACCATAATGG AGAAGGAAAT GGCCAGAGTG GCCACTCTGC AGCGGGCCCT GGTTTTACGA GCAGAACTGA GCCTAGCAAA TCTCCTGGAA GTCTGCGCTA TAGTTACAAA GATAGTTTCG GGTCAGCCGT GCCACGAAAT GTCAGTGGCT TTCCTCAGTA TCCTACAGGG CAAGAAAAGG GAGATTTCAC TGGCCATGGG GAACGAAAGG GTAGAAATGT AAAATTCCCA AGCCTCCTGC AGGAAGTGCT TCAGGGNTAC CACCACCACC CINACAAGGN GATATTCTAG GGGGTACTCA AGAGCAT

SEO ID NO:792: (Length of Sequence = 258 Nucleotides)

GATCAATATA TOCAGGAATT TGIGAAAAGA TOCTAAACIT TTCAAACATG TOACAGGTAG TACTIGAAGT ATGCTTGGTA
AAATGTACOG GITAAAGCAG TATGITICIC AGATAGCCIG AGATTITATT TAACAATTAT GIATCTAAGT CTACTAATAC
ATTIGAGCAA AAGAGIGITG GGINCATAAA TAAGANGICA GIATTICACT TAGATTATIT CAGAAACITG TAAGINCCIG
TAAATAGCIA CTCTGAAA

SEO ID NO:793: (Length of Sequence = 282 Nucleotides)

GGAATGACAT GGICATTCIN ACTIAAAAGA AACATTTIAG GITCACACTI GCCAAGITAG GAAGAAAACC AACCITAGAT
CCCTTCCCCC CCACCAATAC TCCTTTCCCC AAACACCGTC CCCACCCGNC TCTATGITTA AITGAATTIT TATTTGIGAT
ATATAGAAAA CCTAACCCAT GGCTGINATG CTGAGTGICA TTTGGCTTCA AGCTCGAACC AGGGNACAGC TTGGCCTGGA
ÀCCCTGAGAC AAGATGCTGG CCTCANAAGG TGGGGGCTCA CG

SEO ID NO:794: (Length of Sequence = 330 Nucleotides)

7

GITGAGCCIG CAGGGAGCCA TGITCACCCC ACIGCACIAC AGCCAGGGIG ACAACAAGAA CCITICICGG CGIGAACCCA GGGGGCGGAG TIGCAGIGAG CCAAGATCGI GCCACIGCAC TCCACCAGCC TGGGIGACAG AGCAAGACIC CGICTCAAAA AAAAGITTAC TACICGGCIT TAATTATTIC GITTCGGITT TGGGIGAAAT NATITTATTA CIGACIGGIT CCITAGITGI ACAGAAGCCI ATTATCITTA GAGAGACICI TCATGGIAAT TAACTCAGAT TCTTATTITG CCIGGGIGAA AGGANGGCAA GIGGATCIAA

SEO ID NO:795: (Length of Sequence = 332 Nucleotides)

GGAAATAAAG GTGACATGAA CTAACTATTC AATCATGAAT GGTAGAAAAA AATGAAAATG TAACGAGATG GGATCCGGGT
CAAAGTCAGG GGAGGTATAG TIGAAGATAT TGAAGGAGTC ATTATGATAC CAAAGAAAAT GGAAAGANGT GGTATCCAGA
TAGGTTATCC TTGGAGAGTA TCCAGGGATG TCTCTTINCC TAAGACCITA GAGAAGGAAA GGATGGCTGA TAATATAGGG
AAAAGTTGAC ATGGAAGGAT TAAATAATTT TTINAGAATT CACGTAAGGN ATGATAATCT GAATTTCCAG GGCTAGGCTC
AGAAGCAGAA AT

SEO ID NO:796: (Length of Sequence = 305 Nucleotides)

CCCAAGGGA CAGCCIGANC TCCCIGCTCA TAGIAGIGGC CAAATAATTT GGIGGACIGI GCCAACGCTA CICCIGGGIT
TAATACCCAT CICTAGGCIT AAAGAIGAGA GAACCIGGGA CIGITGAGCA TGITIAATAC TITCCITGAT TITIINCITC
CIGITTATGI GGGAAGIIGA TITAAATGAC IGATAATGIG TATGAAAGCA CIGITAAAACA TAAGAGAAAA ACCAATTAGI
GIATIGGCAA TCAIGCAGIT AACATTIGAA AGIGCAGIGI AAATTGIGAA GCATTATGIA AATCA

SEO ID NO:797: (Length of Sequence = 337 Nucleotides)

GECTICATTA TEACAAGAAG TCAAGCTTCA TGACAGTTAG TATGCCCTGG AGTCTGCAAA GTCTGAACTG TATTCTCATA
GAATGATTCC AGGTTTCAGG GTGTTCCACC TGCCAGAACC CAAAACTACA ACTATGGGCG ACACAAGGGA AGTTTTAGAA
ATCTCCCTCT ACACGCATTT CTGGTTTTCT ATTATTCCTC CATGCCAGCT GACAGATCTG GAAGTCNAAA TAGGGGATTC
TCAAAAATCAA AGCCANGAAG ACACCTTGTG TGACACCCAAT GGAGTCTCAG AGGGTGGGAA TAGAAGTGAC TINENCCCAG
GCATTTGCTG GGAACTT

SEO ID NO:798: (Length of Sequence = 341 Nucleotides)

GAACCCTGGA AGGICTAGGC TACAGTGAGC CATGITTGCA CCACTGCACC CCAGCCTGGG TGACAGAGTG AGACACTGTC
TCCAAAAAATA ATAGTGATAA TAATAATAGT CATTTATTTT AAGTCTACAT GCTGAGATGC CAGAACAAGT AAAATTGGAT
TATAGATTCA AGCAGTATGT AGGTATACTT TCATAAACTG AATACTGATG TAATTTTGGA TGATTAAAAAA CAGNCTTTTA
GTAGGTGTTC AAAAATCTGG NITAATTCCTT TCATGACATT CAAACATTTA GGTGGCCTGT CTTTGTTTTT TTAGGNTATA
ACTTGCAAAC ATTCANTTGT T

SEO ID NO:799: (Length of Sequence = 322 Nucleotides)

TTTTTGAGIA ATGAATICAT TTAATATAAA CTTTAGIATA GCAGAATACT ACAGGITACC CACATITAAC CCTAAAAACA
AACAAATGAC AGGCACTICA GIGAAATAAC AAGCCCATGI TCAAATATAA AATGCTAAAA GIGAGAAAGA AATTATGAAA
ATATATACCT TTAATITGCA GACATATAAA CACTITTGGI ACAGTACAGA TGCATGATGC CAAAAAGTAA AATGNICCAG
TTTAAGCTAA CACATTCCTT GITTATACAG NITATITTINC TATAGCTCTC ATATAANANA AATATINCCA GCTCACACAA
TG

SEO ID NO:800: (Length of Sequence = 405 Nucleotides)

ATCAAGAGIT GIGIGGICIA CCGACIGAGC CIGCCAGATA ACCCIGIAGI ACAATITITIN CAGCATAGIG GAAAAGAAAG CCATGGNICI GGGCAGGICA GGGTITGANC GCIAGIGCNI TGTATTAATG ATCATGATGA TAGCTAGTAG ACAGGGCITA CCAGATACTA GGIGCICICI TAACIGCITI ACATATGINA GITAACTCAT TTAATCTICA TGACATCACC CCTGAGATAT GGGGATATT ATAATGCACA TTITATAGGI GATGAGAGG AAGCACTIGC ACAGATTACT CCAGCTTAGT TCATAGCAGA GCIGGGACTI TTAAATCAAG GCACTAGATG GTTCCAGAGC TTITGTACTAC TCTTCCTGGG TCTTCACAG TCTGAGCTGG TCCCGG

SEO ID NO:801: (Length of Sequence = 408 Nucleotides)

CIGCGITCCA TGIAGCGICT TCCACAGINC TCIGTIATAA GAIGGITTGI TACATIGCIG CAGATATTIC TGCATGICIC
TIGAGITTCI CAAGACCAGG GITGIATTIT TCCATGICIG TCGATGAAAC AGIACATGAC AAAAGAAGGI ACITAATACA
TGITTGATAA ATTAATTACT GITTGGIAAA TTAATTATTG AAGGAAGAC CAGACTGGIT CTGATAAATC ATTGATTACA
TTTTACAAAT TTGGATAAAT TAGGGGAGCC TTGAGAAGIT AGAGCTCTAG GGAAGGITCC AGGGAACGIT TGAAGGATGI
GAAATATGGI TTTCAAAATT CATAGITTAT TGCAGGATCC TGGWATACTT TCCCAAGTGA GGGGWAAGAT GAGGAAGANG
ATGGGCTT

SEO ID NO:802: (Length of Sequence = 343 Nucleotides)

ATGAGACTTA CTCACTATCA TAAGAATAGC TIGGGAAAGA CCCACCCCCA TGATTCANCT GGGTCCCACC CACAACACAT
CAGAATTATG GGAGCTACAA TITAAGATGA GATTTGGCTG TGGACACAGC CAGACCATAT TAGACTCATA ATTTGNCTTC
TGCACAGTAA GANCTGGGCT GGGATACCTC ATAGATCATA AACAAATCCG CACCCATGAA AAGATTTAGA GAGTCACACA
GGAAAGTCAA CAGAAGNCAG AGAGATGTGG GTCCTGGNCT TGCATGTCAT TAAGTGGTGG GNTCCTTCAG CTTTCACATN
TTCAGGCAGT GGGGTCAAGA AAC

SEO ID NO:803: (Length of Sequence = 182 Nucleotides)

GAATGCCTT NICIAACGC ATGTATGACT TGCATGANCT CTCTAAAGCT GAACTGCCCT CACCTCANCC TGTCTTGCTG GCAAATGCGG CCTTCAGTGG GAAAGTAAAT GGCAGCTGCT GTNATTACCT GGTCGVTGAA GAAAGACAGA TGGCAAAATT NATGCCTGTT GGGGATGACA GC

SEO ID NO:804: (Length of Sequence = 312 Nucleotides)

TITATTACI GCCGITGIAA AINATCACAA AACATATICA TIGICAAGIG AATGCACAGG CITICAAAGG TGATIGIATI CIGCAAGGIG GGGAATAGCC AACTACCITC TAAGGIGAAT GINCAGCCIG CCATITCCAA CCCCAAAACI CCICTAGATI CICAACAGGG CAGCITCIGC TICATGCCIC INTICGGAAA GGICAGCCCI GIGIAGAAGG CITAATACCA ACATGCAGAT CCACCIGAGA ATCACIGGAA TGCTCIGGAC CCAGCIGGAA TGCTCCOGGA ACCCAGICAG GCTINOGGAA AT

SEO ID NO:805: (Length of Sequence = 411 Nucleotides)

CATGCAAAAT TCAGAATATA AAAAANIGCA GGGCCTGGIT GCCCACATAC ATTCCTCAGG TTAAGGIGGA TTTAAAGATG CCCAACAGAA CCCAATGAAT CAGAAGCTAA AAGGGACACT TCAGIGATCA GCAGACGCAT TCTCTCACGI AACAAATGGA GGGAAAAGTGA GCACACATTA ACTAGCGAAG TCACAAGGCT AGATTAGGGG TGTACAGAAA TCTAATTCCT GGIGCTATTT GCAACTACAT ATATTTAAAA TACAAGGAGA TAAATACCCA GAACACATTA AGCCTACTGA TTTAAACAGA NCATTTCAAG ACTGCTACAC AGAAAGGGAA GGGAAGGGAG CGGAAGGCACA CCTCACATAT TTCCGTCTCA GAGGTTAAAT GGGAAAGGAAG G

SEO ID NO: 806: (Length of Sequence = 287 Nucleotides)

GCATTINAGI GCIGATACAG ATACAGIGAG TICCIGCCCI TICCICICCI NIATATIGAA GGGATIATAA ATGAAGCICT
TTAAACATIC TGAGATCINI AAGITGATTI CIACATGAAC TCCAAGIGGI GITAATGACA TITICAGAAA AGATGCITTA
CITAGCIGAC AAGAAAAAGI ACTCIGIAAG CCTITATITG TATGIGATAA AACAGAGITG ATAAAATAAT CIACTATTAA
CITATCAATG CAGICTIACA GAATCCACCI ANTIACAAAG TAGATAA

SEO ID NO:807: (Length of Sequence = 369 Nucleotides)

GECAGATATA ACCTITICTO AAACATCICT AATIGICIGO ATACCCCACT AATATIGGCT ACATAATACA TITATITITIG
TCATITIGGA CIAAGIGCCI TACTIAGITI TGINCAGIGI ATICATIAAT TGAAGAAATA CITATICAGG ATITCIATTA
CETAGITITIG CICAATATAT TCACIAATIG AAGAAATATI TATNCAGGAC TICCATIATA TGAGCACIGG CCITIGIGGI
ACAAAGATAC AACATGAATC TGAAACICAA TITAATCTAG AAAGATTIAT TAATATAANC TCATCAGAAA AGCAACNCAT
CITACIGIGAT AGCIACAGIA TIGGITAGAA ATGGAAAGAG AGAGCAGAT

# SEQ ID NO:808: (Length of Sequence = 361 Nucleotides)

CAGGCTTIGT ACCAGCCGCC ATACTICTCA AAAGATGTCC CATCCTTTIN CTITCCTTTIG CATTCTTCTC TTTCTTCAGC
ATGCATCCAG ATGGGTTTAT TTTCATCATC TACAGAACCA AACTCCCTTT CATGTGCACG AGTGAGAATC TCTTTGTACA
GTGTTTCTGC TTGCTTGAAC TTTCCTTGTT TCAAATAGCA GGATGCCAGG TTATTTTNCG TCTTAGCCAC GTTGGGGTCT
TCAGGTCCCA GTTTTGTCTG GTAGATCTCG AGGGCTCTTT GATAATAATA TTCTACTTCT TCATACTTGC CCTGGGTTCT
GGCACAGTAA AGGCCAAGTT ATTTAACTGC TTGGCAACAT C

# SEO ID NO:809: (Length of Sequence = 353 Nucleotides)

CTAATTTATC TICATGICCA GIGAGCAGIG TIGCGITTIT CCTIGIAGCA TITGGAAATG ATITACIGGA ATTACAAAACC
CTATTITCCC TITAAATTIC AGCTIGGCT CIGGCIGCTT TITAGAATAA TIGCAAGATAA AAATCACACC TIGAGGGCIGA
AAACGGAGAG GGAATGGGAG ACTIGATATT TAAGCAGCTT GAATGGITTIT CCNFINCTIT ATITITAAAG AAATGCACTT
GCCIATGATA CIGICTCTCC AGIGAAATGA TIACTCCTCC ATITACTCTAT TIGATACANTA TIGIGCATGC TAGIGTIGTA
TITCIATACA GIAGCITGAA AATTGATTAA CCT

# SEQ ID NO:810: (Length of Sequence = 296 Nucleotides)

GAGGICAATG CITCCCAGGC TCGAGTIGAT GCCCACAGGT GTATTGTACG AGCATTGAAA GATCCAAATG CATTTCTTTT
TGACCACCTT CITACTITAA AACCAGTCAA GTTTTTGGAA GGCGAGCTTA TTCATGATCT TTTAACCATT TTTGTGAGTN
CTAAATTGGC ATCATATGTC AAGTTTTATC AGAATAATAA AGACTTCATT GATTCACTTG GCCTGTTACA TGAACAGAAT
ATCACCAAAAA TGAGACTACT TACTTTNATG GGGAATGGCA GTAGAAAAATA AGGAAA

# SEO ID NO:811: (Length of Sequence = 493 Nucleotides)

CCAGGAGCTT CTCCTCTCTT GCCAGGGCTA TGAGCAGAAA CCTCAAATAA ACCCTGGGCA GAGAAAACCA ACTTAATGAA
GAGGACGTTG CTGTTTCCAC TGGCTTCTAA TTTTGCAGAT GCAATGAGCA CTTACGGCTT TTGCAGTGGT TCAGGAAAAG
GCAAGAAGAA GCAGATTGTC ATGTTCCAAA GCCCTCTGAT GGCTGCATGG AGCCAGCGGT GCTGTGACTT TTTTTAATAG
GTTCAGTACC TTTNATACGT ATGTCCTTAT TTACTCTTTA TCTATGCTCT CTTCCTCCCA TCAGCCTGGG AGCTCCCTGG
GGCAGGTCTG TTTCTCCCCCT CCAGTCCGGA NITCGCAGGA GCTGTGCCTC CCCCATCACA CTTGGAGGCT GTCTNAAGGC
AGGGGCTGTG GTCTCTGCCA TTAGACTNGA AGCTCCCCAA GGTTAAAGGT CATATCCTCA AAAAAGCTTA GAATAGCTTA
GGAACCTAGG GGT

# <u>SEQ ID NO:812:</u> (Length of Sequence = 337 Nucleotides)

AAATTCACAT ACTIGIAAGI NATGCAAGCA AATTCICACA TAATTATTIT TAAATGCTAG ATAGITGGTA TAATTNCAAT CATTITAAAT ATGITAAGAC TIGITITGIA CCCTAACATG AGGICTATNC TGAAGAATGI NCCATGIGCA CITGAGAAGA ATGACTGGAG TGINCTITAT ATGITATGINA GGICCAATTA GCTTATAGAA TIGCNCTAGT CCTCTATTIC CITATTCANC TITTIGITTGG TIGITGINCT ATCCATTATT AAAAGTGGGG TATTGAAGIC TCCTACTATT ATTGIGCTAT CATCCTCAGC AAACTAACAC AGGANCA

SEO ID NO:813: (Length of Sequence = 310 Nucleotides)

AGGIGGCCIC AGNICAGCCA AGCIGACCIT GGCACITGGC TGGCITCINI AAGGCANIAG AGIGCCCACA CATAAGCNCA CCACCINICC CCACCICCIC CCITCICCC CATGCCACC CACITGCITC CAAGGGCTTG GITICCAAAG TNACATCCAG GGIGIAAGAG GITGGGGAAA ACGICCIGCA AGNIGGCICA GGGATCINAT TCCATCAGAT GGICTCATGA ATACTGIGGG AGATTAAATC CATCICAAAA TAGGCAACCA ATGCTATATT CIGAATNINA GGICTCTGGA CTGAGTCCCA

SEQ ID NO:814: (Length of Sequence = 361 Nucleotides)

GATTTGAGCC ATCAGAATTC AGCTTTTGTA GATAAAGAAT ATGAACTAAT TGACTATGGA TGGAATTATT GTATATAGTC
AGCTTGCTGA ATTATTGGTT AAGCACTACT AACTATATCT TGGTAAACTA TGGTGCAACT GAGCCACCCC CTAAAAGCAA
AAGACATTTA GCAGTTCACC ATATTTTGCA ATTAACCAAA TGAGAGCCTA TGAGANTGAA ATGNITTCAG GTGGAGTTTG
ACAATACAAT TCATCCNIAA TATATAGGGN NAAATATTTC CTCAAAAAATA ACATCTATGT GGTAGGNCCT TAAAAACGAT
GGATGNAATG CATGCAAAAT TCTCTGGTAC ACAGACACAT G

SEO ID NO:815: (Length of Sequence = 301 Nucleotides)

GAATTINACT CITGITICCC AGGCIGGAGI GCAATGGCAC GATCITGGCI TACCGCAACC TCCGCCIGCI GGGITCCAGC
GATTCICCIG CCCCAGCCIC CIGAGIAGCI GGGACTACAG GCATGCGCCA CCACGGCCAG CCAATTITIG CATTINAGI
ACAGACGGGG TITCACCATG TIGGICAGGC TGGCCTCGAA CTCCCGACCI CAGAGGATCC GCCCACCTIG GCCINCCAAA
GIGCTGGGAC TACAGGIGIC AGCCACCACA ACCGGNCIAA TIAATACTIC TIGAAATTIC A

SEQ ID NO:816: (Length of Sequence = 310 Nucleotides)

ATCTITAACA TATTAAAATA GACATGAGAA AAATGTGTCA TITGATAAAA TGGGGGAAAT GIAATAAATG ATTACCAGAA ATATAAAATT AAGCCGTATA TGCNCITAAG TAAATGGAAT CTAGGCATCC TTAAAATGTA AAAAAGGNTG CAACAAGAGT AAGGRGCCCA GAATGATGTA AATTACAGGA ATGGGGTGTA ATGTAACCTC TAGAGGAGGT GATGTTTAGA AGAAGCAAAG MGAATGCAAT GANGAAGCAA ACTTGTTTTA GGCAAATNCT CCTGGGAGTG GGACCAGGCA GCCCCCTCTT

SEQ ID NO:817: (Length of Sequence = 225 Nucleotides)

SEQ ID NO:818: (Length of Sequence = 225 Nucleotides)

TTAAAAAAAC CIGIAGITIC ATTACCTITI TGAATAATGN CATACAAAAA ATGIATTIGN TITTITGIGC TGIGAGAATT
GATGITTIGIA GATTAATAAT CATTITGITT AGAATTACAA AATAGITTIT AAATATTIGIC TGAGAAAAGC CAAAGITAAT
GCAACCNAGT GGAAACTIGIA AGACCNITIG AGIATTGITT GITTITATTGG ATGCATTTGG ATTIT

SEO ID NO:819: (Length of Sequence = 280 Nucleotides)

TIGACIAGET TECTACGICA TIAAAAATTE TITAAATAGI CIGICTIAAT GGCIGCAAAT TITGICGIAA GICTGGGCIA
AAATCIGATG AAATGITITA CEIGIGGITA AGIAATTIAG CAACTEGIAT CITTITAAAA TATTACAACT GGGNATTEIA
GIACGICACA AACATIIGIN ATATCATTTA TITTGIGCCA TIGICTIGIGC TATGAAATAC AGIAGAATGA AAATTIACTT
CAAAGCATIC ATINICTICC CCCAGGGNAT GATGGCAAAA

SEO ID NO:820: (Length of Sequence = 328 Nucleotides)

CCAGITAATT TIGIAAAGIT TATAGAGATG GITTCAGITA GACCTGIGCI GICAATACAC TAGCAATTCA CATGCACATT
TAAMITTAAA TCIAAGITTA AATITAAATT AAGITAATAT TAAATAAGAT TIGAAATGCA ATICTCAGIC CTACAAGCCA
TGCTTCAAGI GCITCATATC CATGIGAGGI TAGIGGCIGC TATACTGGAT AGGGAAAAA GAGAACATTA TIGIAATCAT
AGAAATTCTA TIGGIAAGIT TATGGGGIAG TACATGGACT AGAATGIAGI GAGGIAGIGA GCIGIGGATG CAGAGAAAGG
NCACTGGA

### SEO ID NO:821: (Length of Sequence = 310 Nucleotides)

TCAGCATIGI TITCIGIATG INTIGAGAIG ATTATITIGGI TITCCTITIT ATTGIGITAA TITGGIGAAT TGCATCANCT
TTAGIATCIT AAACCAACCI TGCCTCTCIA GGGIAAACCI TATGIGGICA TAATATATAA NCCITTAAAT ACATTATIGG
ATINCITITI TIAATATATI GCIGAGGAIT TITCATGACI ATAATCATAA GAGATATIGG CATATGATIT CCTATACTIG
TAATCNCTIT GITAGAAGGA GITTATATTA GCNITITATNC TGGCCTCATA AAATGGGTTG AGAAATGTCC

#### SEQ ID NO:822: (Length of Sequence = 372 Nucleotides)

GCCAGATIGI NITCCITGG AGCCCTGAC CCCGGCTACT CITCACCAGA CACGGCCCGG CITTGGCCCA CAACACAGCC
GTCCCACCCC TGGITCCITC ACCTTAGCAG TAGCAGTAGC TCTGGGTGGA GTTGCCAGAG GAGCTGACAG GCCCTCTGCC
ACTGCTGCCA CCCCCAGGGC TAGGGAGGGA ACAAAGAGCC TGCTTGCTGT GCTTGCACCAT CCAGCATGCC ACAGCTGCAC
TACGGNGAGG AGGTCAGACA GTCCCCCCAA CAAGNCCCCG ATCCCTCTNC TCTCCACCAG GGAGGGCCCT GGGCTTTGCG
CCCACAGNAC AAAACGTTCC ANCCCGGGCT GATCATTCTG GGTTGGCAGC GG

#### SEO ID NO:823: (Length of Sequence = 288 Nucleotides)

AGCTGGCATC CCTGGGGAAA ACCAACGAAC AGTCTCCTCA CAGCCAAATT CACCACAGTA CTCCAATCCG NAACCAAGTG CCCGCATTAC AGCCCATCAT GAGCCCTGGG CINCTTTCTC CCCAGCTTAG TCCACAACTT GTAAGGCAAC AAATAGCCAT GGCCCATCTG ATAAACCAAC AGATTGCCGT TAGCCGGCTC CTGGCTCACC AGNATCCTCA AGNCATCAAC CAGCAGTTCC TGAACCATCC ACCCATCCCC AGNGCAGTTA AGCCAGGCC AACCAACT

## SEO ID NO:824: (Length of Sequence = 325 Nucleotides)

CTCCTGAGGT CAAAGCTGCA CGTGGGGAAG AGAAAGACAA GGAGACCAAG AATGCTGCCA ATGCCTCTNC ATCCAAGTCG
GCCAAGACCG CCACTGCAGG ACCAGGAACT ACCAAGACCN CCAAGTCATC TGCTGTGCCC CCAGGCCTCC CTGTGTATTT
GGACCTGTGC TACATTCCTA ACCACAGCAA TAGTAAGANT GTTGATGTGG AATTTTTCAA GAGAGTGCGG TCTTCCTACT
ACGTGGTGAG TGGGAATNAC CCTGCTGCTG AGGAGCCCAN CCGGGCTGTC CTGGGACGCT TTNTTTGGAA AGGAAAAGGC
TCAGT

### SEO ID NO:825: (Length of Sequence = 318 Nucleotides)

AATCAGCCCT ACAGCGATTC CTCCACCCCC ATTAGCAAAT ACCGTAATAT ATGNCTCTAG TAATCATCCT CTCACAATTC
TNCTTTTCCT AATTINNCCG TGAGTCAAGT TTCTTGACCA CAATGTTATG CTGAGGAAGA TCTAATGTTT TCCATGGAGC
AGAAATTGTT AGTCCTCAAC TCCAAGGTCT GCCTTGTCAA GCCCTGTTN CCGTGTCTTC ATAAACCTTG TCAGGCATTT
ATTTATTCAG CACATATCTA CTGINCTCTG CACAAGAATT CATAAGGTTC TGATGAATTA TGTCCCTTCT GAGTGGGA

#### SEQ ID NO:826: (Length of Sequence = 287 Nucleotides)

TACAGACTCA GGTTATAGGG TGINATTTC TAAGTCAATA TTCAGTTTCA CAGCCAGAAT CTGTGAAGAG AGAACAAACC ATGAGAAAAC TAACANTTTT ATGGTGATTG AGAGGTTCCA AGINCCTGGN GTTTTAAAAA AATCAGTTTT TAAAGATAAA

CAAACTAAAA CTAGTCCAAG CACTGAGACA GAGTATTAAA AGATGGTAGC ACACCCAAAG NGCACGGTGG GTCTTGAATA
GCTAACATGT TTCAAGTAGT GGAGGNAGAT GTGCTTAAAT AGTTACC

SEO ID NO:827: (Length of Sequence = 426 Nucleotides)

TTITTITIET TITGGGACAG AGICTCACTC TGTCACCCAC GCTGGAGTGC AGTGGGGTGA TCTCGGCTCA CTGCAAGCNC
TGCCTCCCGG GTTCATGCCA CTCTCCTGCC TCAGCCTCCA GAGTAGCTGG GACTACAGGG GCCCGCCACC ACGCCCGGCT
AATTTITTTG TATTTTTAGT AGGGACAGGG TTTCACCCGTG TCAGCCAGGA TGGTCTCGAT CTCCTGACCT CATGATCCAC
CTGCCTCGGC CTCCCAAAGT GTTGGACTAC AGGCATGAGC CACCGCGCCC GGCCGGATGG TTAAAACATT TTAAAAATAA
ATATTTAGTG CTAAGACAGG ATATGGAGCA ACAGGAACTC CTATATGCTT GCTGGTGGGG AATGCAAAAT GGGTACAACC
ACTTTTGGGA CAAACAGTTT TAGTAA

SEO ID NO:828: (Length of Sequence = 402 Nucleotides)

GECTECTTEC TOCACTCAAA CAGGTATCTE GGAGCCAGCA CTCTGGCAGT CCTTCTAAGC TCTAACTCTE GTTTTACTGT
TTTNNAGGTE AAACCTTTGT CCTGGGGAAT AGTCTGGCCC GCTCCTTGGA ACCACACTCA GACTCAATGG ACTCTGCCTC
AAATCCCACC AACCTTGTCA GCACCTCCCA AAGGCACCGG CCCTTGCTTT CATCCTGTGG CCTCCCACCA AGCACTGCCT
CAGCTGTGGG CAGGCTATGC TCCAGGGGTA AGCTTACCAG AGTCCTGGCC CTNCTTCCCT CCCTCACTCT TTCCTTCACT
TCCTTCCTGA GCTCTGGGAG GCCAGAGAGG ACCTAGCTCT GTTGCCCTCT GNCTNGTGGT GGGGACTAGG GACTGGACTT
AA

SEQ ID NO:829: (Length of Sequence = 417 Nucleotides)

ATCCETTAGE AGTCCCCTIT ATGTCGCAAG AGAGAAAAAA ACTTCGTCAA ATGCTTCTC GACTAATTCA AGAAAAATGT
AAACTACTTC AAAAATTTAG CCTTATTCCA AAAGAGTATG AAGGCTATGA AGTACAGTCA TCTTTAGAGG ATGCCAGCTT
TCAGAAGGCG GCANAGAAGC ACGAAGTTTG GAGGCAACCT GTGAAAAGCT GAACAGGTCC AATTCTCGAAC TTGACGATGA
AATCCTCTGT CTAGAAATAG AGTTAAANGA AGAGAAATCT AAACACTCTC AACAAGATGA ACTCATAGAC GATATTTCAA
AAAGGATACA ATCCTAGAA GATGAGTCCA AANTNCCCTC AAATCCACAA ATAAGCTTGA AGNCCAAAAAT CATTCTNGCA
AGGTTTCTTC CCAATGG

SEQ ID NO:830: (Length of Sequence = 404 Nucleotides)

GGITTGAGAG TAGAACAGGA AGTTGTGAGT AGAGCCTTGA AGGAAAGAGA ACAGCAGGTG CATGGNTCCC CAGGCAGGAC

ȚCAAGGTAGC CACTCAGGCA TCAGAAAGAG TCAGGCGGCC ATGATGGCTC ACACCTGTAA TCCCAGCACT TTGGGAGTCT

GAGTCGGGTG GAVICACCTGA GGTCAGGAGT TCGAGACCAG CCTGACCAAC AGGGTGAAAT CCCTTCTCTA CTAAACTACA

AAAATTAGCC AGGTGTGGTG GCACATGCCT GGGACAAATT TGGGATCAGT GTTCTCCAGT CTGAACATAG TCTTCTGTTA

CCTGGGAGAG AGTGGTCAGG TACTTCCAGC TTCAGGGCAG CCAAAAGCAT TGACAAAACG ACAGGTAGGA TGGGGGGAGT

AAGT

SEO ID NO:831: (Length of Sequence = 330 Nucleotides)

AATTICACAG GITGIGICIT CTGAAAICIG TACCITCITA CICATAACAT TIAATGIAGC ATTICICAAC CTGACCAATC
TGCAGAAAAT ATATGCATA TATTAATIGI GIATACATGA ATATATGCAT TITCCTGGTA AAAAGICATA GITTINCATA
GATGICATGT AATCTITTAA GAGATTCTCA AATAGGAACA TGATTCCACC CCAATAATGG TGAAAAATGA TCAATTTAGA
TGAAAGGGAC CTCAACAAGC CTCTTGAGAT ATGAANCATA AAGAGNAAAT ATAAGCCGCA ACTITTTGAC ATGACAGATT
CATAATGGTT

<u>SEQ ID NO:832:</u> (Length of Sequence = 402 Nucleotides)

CIGITTICIC CITITGITT CCIATITAIN CICCCAGIGC TAACITGATA TCINCTIGIG TGIACACGIG TGINIGIGIG CAAATATAIT TCIAGGAACA AGAGCAAACA TICTAGTAAC TATCATICIC TGATGIGGAG AACITGGGCA GAGATCTGAG TTACAGCTIT GIGGATTATA TCICICIGAT GAGAGATCGC CCCITAGAAT GICATGGTCC TAACCCCGTC ATGGATACCA GGGGIGAATG GCAGGGTTCT TCICCIGCCC AGGAGGAAGG GTATGGGGAG CCGGTGCATC TIGACTGTCA GGTCACCTGT CTTACCACCT TTACAGCTAG GCTTTCIGAG GIGCCAGCGT CTCCTGGGAA TTCAAACTGT AGTTTAGAGG CAAGCTGGGT GA

## SEO ID NO:833: (Length of Sequence = 398 Nucleotides)

AGCCTTTTC CAGAGATCAG ACCTCTTAG ACATCTGAGA NTTCATACAG GAGAAAAACC TTATGANTGC AGTGAATGTG
GAAAAGGCTT CTCCCAGAAC TCAGACCTCA GTATACATCA GAAAACTCAT ACCGGAGAGA AACACTATGA ATGCAATGAA
TGTGGGAAGG CTTTCACAAG AAAATCAGCA CTCAGGATGC ATCAGAGAAT CCACACGGGA GAGAAACCTT ATGTATGCNC
TGACTGTGGG AAGGCCTTCA TCCAGAAATC ACATTTCAAC ACACATCAGA GNVITCATAC TGGAGAAAAG CCGTATGANT
GCAGTGACTG TGGGGAAATC CTTTCACTAN GGNAGTCACA ANCTTCCATG TGCATCAAAG GNVINACANC CCGGGAGG

#### SEO ID NO:834: (Length of Sequence = 394 Nucleotides)

CTTTTTGIT AGICIGIAAA ATCATTICCA GGIAAAATCI AGAGCITAAT CCATATGING TGCCATCTIT TGCTTTTCCA
CACCICINAT CCTAGGIAAG TNAGAGCIAA .GAGIATTIN CTGAGCITCT ATTATGGGCC CAGCATATGI NATAATTCCT
TTTACACATA GGAATCTGAG GCTTAGAGAA GITTACTGAT TTACCTAATG GCACACCATA AGINCTGGGG CTAAGATTTA
AACTCAGGIC TCCTGACTTA ATTCAGATGG TCAGCTCGAT GGIAATCATA ATAATATTGI NGITGITGIT GTTGTTGTTA
TNIATCAACA ATAGIAGIAG CTAAGICCAT TTCATGAAAC AGCTCATTGG ATAGICCCAT NIGGATAATT CTGA

#### SEO ID NO:835: (Length of Sequence = 422 Nucleotides)

GCTTTCTGCC TCTATAGATT TGACTATTCT GGACCTTTCA CATAAACGGA ATCATGTAAT ATATATAATA AGCAAAAGGT
AACAACAACC AAGCTGGCAA TTTGGTTGAT GAATGANTAA ACAAAATGTG CTGTATCCAT ACAGTGGAAA TATTGGTGCC
TACTACATGT GGATGGACCT TGGAAACATC ATGCTGAGTG AGAGAGAGCC TTGGTATTGT TTCATCTCCC CAGGAGATTC
CAAGGTGCAG CCAAGGTTGA GACCCACTGA CAAGCAATGG ATATGGTTGG GTGCAGATGA AATAAGGCAG CCAGGGGCAG
GAGGGATGTC TCATTGAAGA TGACTGTTTT GTGGGATGCC TAGCAGGGGT GGGGGGATGA GGTATTGATA ACCAGCAACC
CCAATCTTCA ACACAGGTG GA

#### SEO ID NO:836: (Length of Sequence = 408 Nucleotides)

CTCAAAAGAG TTGGCATCTC AGAAGGGAAG TGTAAGINAG ACAATTGTCA TTGATGATGA AGAGGACATG GAAACAAATC

AAGGGCAAGA GAAAAATTCC TCCAATTTTA TTGAACGAAG ACCTCCTGAG ACTAAAAACA GAACCAATGA TGTGGATTTC

TCCACTTCCA GTTTTTCAAG AAGTAAGGTA AATGCAGGAA TGGGTAATAG TGGTATCACC ACAGAACCAG ACTCTGAAAT

TCAGATTGCT AATGTTACAA CTTTAGAAAC AGGTGTAAGC TCTGTGAATG ATGGCCAATT AGAAAATACT GACGGGCGAG

ATATGAACTT AATGATTACA CATGTAAACA TCACTGCAGA NTACCCACTT GGGAGGATTG TCTCTAACCG GGACTGCAGT

CCAAGTAA

#### SEQ ID NO:837: (Length of Sequence = 347 Nucleotides)

TOSCICIGIT GOCCAGGCIG GAGIGCAGIG GCACGATCIC AGCICACTGC AACCICTGCC TCCTGGGTTC TAGCGATTTG
CCTGCCTCAN TCTCTCAAGI AGCTGGGATT ACAGGCATGC ACCACCACTC CTGGCTAATT TTTGTATTTT NAGIAGAGGC
GGGGTTTTGC CATCTTGCCT AAGCTGGTCT CGAACTCCTG GCATCAAGIG ATCCATCCAC CTTGGTCTTC CAAAGTGCTG

GGATTACAGA CGTGAGCTAC TTCACCTGGC CTTGTTGGCT CTTTTTCAAA AAAAGTTTAC TMGACTCTTG CTTTATTGCA AGTCCCAGAA TGGATTTGAT TTAGGGA

SEQ ID NO:838: (Length of Sequence = 275 Nucleotides)

AATTGCCAAG GAAAATTTA TTTTAGCTTT GCATTAACAT ATTCTAAATA ATCCTTTCAC TTAATGCAAT CAGATTCCTG
TGACAAGCCA AATACTTGTT TTTTTGIGIG TGIGIGITTC CCCTTCACTT TTCATTGTAT GCCCTTCAGA AAAATCTGAG
AAGTGGGCTT CCATTTTTGA AAAACAGGAC TTCCTTAGTA CCATAGATAC GTAGATTGCA ATTINCCTTT TCCTGCAGCA
TTACTGACCT TGIGAAATGA TGCCTATGGA TACGG

SEQ ID NO:839: (Length of Sequence = 387 Nucleotides)

SEO ID NO:840: (Length of Sequence = 367 Nucleotides)

GTACTAAAGC CATGCAGGAA GGAGGAAATA ATCAGTGAGC CACGGCTGA ACTTGTGGAA AAGAAATGGA GGGCAAGGTC
ACAAACCAGT CCCTAACTGC TTCTAATTTA ATGTAATCCT CACTGTTTGT CATTATTGCT TTINATGGCC ATGAAATCTG
TTTTTTCCCCCA GINCTCTAGT GTAATTTGGA ATTAATTTCC CAGCTGCTTT ATTTTTTTCC TAGAAGAGTC GGGGACATTT
TCAGGATTAG TAGAGGTGTT TCTACAACAC CTTCATGCCT TCGATAGTGT GTAAGAGTTC ACCAATTGAN TTACCTTATT
CTGTTCAGAA GTAGTAACTA TGGAGTTTAA CCACTCTGGG ACATAAT

SEO ID NO:841: (Length of Sequence = 346 Nucleotides)

TGGAAAGGAA AAGCAAAAGA TTGAAGAATA AAAACATTIT GTATTTGCCA AAACTTGINC TGTAGCAGTA AGTGTGAAAC
AAGTTTGCTA CATTTTCCTT TTTGGTTTTA CTTGGTTGGG GCTTTTTTGT TTGGTTGGTT TTAAAGGATT TAGGGGATTG
GCAAGTCAGT TTGTCAGATG TCAATGAACA GAAAACCTAA GAAAAAAGGT AGCAAAAGTN CTGCTGGCCC CAGATGGATT
TTNCCTTAAG TAATTTCCTA ATCATTAGTT ACAGCTCTGT GTCAAAAGAT GTACATAGAA ATTTATGCTA GATTCTTAAC
ATCTTTCCTT ACTGTGGCA GAAATG

SEQ ID NO:842: (Length of Sequence = 326 Nucleotides)

GITCITIGAA ACAAACGAGA ACAAAGACAC AACATACCAG ANICICIGGG ACACATICAA AGCAGIGIGI AGAGGGAAAT
TIATAGCACI AAATGCCCAC AAGAGAAAGAC AGGAAAGAIC TAAAATIGAC ACCCIAACAT CGCAATIAAA AGANCIAGAG
ANGCAAGAGC AAAGACATIC AAAAGCIAGC AGAAGGCAAG AAATAACIAA GATCAGAGCA GAACTGAAGG AGATAGAGAC
ACAAAAAAACC CITCAAAAAAA TCANIGATIC CAGGAGCIGG TITITGAAAA GITCAACAAA ACTGATAGNC CACIAGCAAG
ACTAAT

SEO ID NO:843: (Length of Sequence = 380 Nucleotides)

GECCTICAAA TIACAAAAAG CAATTIACAT TATAGIAATA GITCATGITT ATAGIACAGG AACAAGAATG AGTTAAACTA
AATATICCAA ATCAGIACAA GINATINCCT TTTTTTTTT TIGAGACAGG GICTCACTCT GICACCCAGG CIGICITGCT
TIGICATCCA GGCTGCAGIG CAGIGGAGIG GICACAACTC ACTGCAACTT CAGCCTCCTG GGCTCAAGCA AGCCTCCCAC

CTCAGIAGCC TCCCACTCCT GATTAGCTGG GACTACAGTG AATGTGTCGC CATGCCCAGC CTAGTGGTAT TTTTAACAGA
TAANTAAGAA TGGAGGTAGT GGCAGAGGTG GAGTGAGANG AGAGACANGT AAAATATAGG

#### SEO ID NO:844: (Length of Sequence = 257 Nucleotides)

TTICCCICIC GITGCCCAGG CTGGAGIGCA ATGGCGINAT CTTAGCTCAC CACAACCICT GCCTCCCAGG TTCAAGCAAT
TCICCIGCCT CANCCTCCCG AGTAGCIGGG ATTACAGGCA TGINCCACCA CGCCTGGCTA ATTTINIATT TAAGTAGAGA
TGGGGITTCT CCATGITGGT CAGTCTGGTC TCAAACTCCT GACCTCAGGT GATCTGGCCA CCTCGGCCTC CCAAAGTGCT
GGGATTACAG GTGTGAG

### SEO ID NO:845: (Length of Sequence = 420 Nucleotides)

CTACACACAT CITICATTAC CIGECAGIAA GCITIGAGAG TAAGITITIGC AGATGCAGAT CAGAAGAGAT TAGGAAGAGC
TITIGCAGATC ACCGCAAGIA TITIGIATITC ACTCTAAATI AAACAGAAAA CCCAGGAAGG GITITIAGGCA GATAAATGGC
ATTATITIAGI TICIGIATITI AAGICATCAT TIAGGITIACT GGGGGAGGCT GCCCTGAAGI GGATCAGAAG TAAAAGGCAG
AGATACCAGC TAGGAAGCTG TIGCAGIGAG CCAGGIGAGA AGAGAGGGCC ACCIGGACCA GGIAGAAGCA GTACAGGIGA
AAAAANICAG ACACTICCAA ATCITICCICA AGATTINATA CATTATITIGG CIGGGCACGG TGGGCTCACA CCCGTAAATC
CCAGCACTITI TGGGGAGGCC

## SEQ ID NO:846: (Length of Sequence = 215 Nucleotides)

GNCTGGGTGA CAGAGTGACC CTGTCTCAAA AAAACAGTGA TTGTTTGTAA GGAAATTATT AAAACCTTGG TTCAATATCC
AATATCTTAA CTTTAAATTT TCAAATACTT CAAAACTAGT AAGTATTACT ATGTCTAAAG CACAGTGCAG TCCAACGGAN
TATGTGAGCC ACATATATAA TTTTAACTAG GCCAGTAGTC ACATTAATAA GAAAA

## SEO ID NO:847: (Length of Sequence = 266 Nucleotides)

ACACGAAGAA TCTCCTTCAT CGCCAAACAG CTTTCAGAGA TAGATGCTT GTTTCCAATC GAGCATGCTA TTCCAGTGTA CTGNACATAC TGTX...'ACCTC GTGTTAGGCA CCTTTATGAA GAGATNAAGN CACTGGCATT TCAGTGGGAT TTTAAGCATT TTTAATAGCT TCATGTACAG CATGCTGCTT GGTGNACAAT CATTAATTCT NCGATATTTC TGTAGCTTGA NTGTAACCGN TTTAAGAAAG GTTCTCAAAT GGTTTG

### SEO ID NO:848: (Length of Sequence = 275 Nucleotides)

CNCCTCGGTC CCCTTTTAAA AATTACTTT CAGCCGGGCA TGGTGGCTCA NGCCTTGTAA TTCCAGCACT TTGGGAGGCT
GAGGTTGGAG GNTCACCTGA GGNCGGGAGA TTGAGATCAG CCTGACCAAC ATGAAGAAAC CCCGTCTCTA CTAAAAATTAC
AAAAATTAGC CGGGCGINGT GGCACATGNC TGTAATCCAG CTACTCGGGT GGCTGAAACA GAAACCACCA ACGNCTGACC
TCAGGGAGAT GTCTAAGAGC TTCTGGCATG CCTCA

### SEO ID NO:849: (Length of Sequence = 318 Nucleotides)

GGAATTTINC TAGTGAGGAG TOGAGGAAGG GGGCCTGGTG GAGGAGTAGC AGCCTTINCA AAGGCCCTGA GGCAGGAATA
CCTGGGAAGT GGGGCGTGC TIGINTAAGA TGAGGCCTAAA GAGGAAGGCG AGGCTTTACT TAGGAGGAAT GGGAAGCCAC
TGAGTGTTAA AATTAAAAGC AGINGGGGT GGGCACAGTG GCTTACACCT ATAATCCCAG TACTTTGGGA GGCCAAGGTG
GNTGGNTCAC CTGAGGTCAA NGAGTTNAG ACCAGCCTNG CCCAACATTG GGCTCTACTA AAAGTACAAA AATTAGCT

SEO ID NO:850: (Length of Sequence = 320 Nucleotides)

ATGICTGCCA ACTCAGGAGC AGGGCAGGAA TCAAACTITT TGGAGTTGCT ATCAAGINCT TGATTTINCA ATCCCAACCG
TCCGCAGAAC ACTAGATGTG TGNATGINTG CTTGTGTGTG CATTTGTAGT AAAGAGGGGG TTGAGAAGTG GAAGGCAGAG
NCAGGAGTNG GCATCTACCA NGGCATACAT NAAAGACCCT TACACCAACA CTGCCCTTCC CAGNAATGTG AGTGTAATCT
GGTTTCCTAA AACCCTGGGC TGCAGTCCAG ATAGTCATGG TTAGANCAGA TGGTTGAGGA AAGGTTCAAG GCAGTAGGAT

SEO ID NO:851: (Length of Sequence = 170 Nucleotides)

CATCCAAGAT ACCAAGATAT ATGAGGGAAC ATTINNITTA ATAAAAAACA CAAAACCACA AATCCAAGAG GCTCAGNIAA
CCCCAAGTAA AATATATACT AAAATACAAG NAAAAGGGAA AAAATGCATG NACACACACA TATAGGCATA TCATATTCAA
ACAGTTGITA

SEO ID NO:852: (Length of Sequence = 256 Nucleotides)

CAAAGIACAC ANGIGIATIT ATTACATITI GCAAGCACIC TGITCTACAT TICAAAAACG CCACCNICAA GCIGITGGCA
CAITTATGIA CAAAACAGAT TAATTGIAAT GCCIGCTACA AAGCACICTG TGAAAATACA AACTCIAATA CCAGAAATAA
AAGCCAAAAG TGICAACATC ATTACATAAG TNGAAAAGIC AGITTINGAA ATTATCACAA ACTGITATGN CACGGAACTG
AAATACTATA ATATAG

SEO ID NO:853: (Length of Sequence = 281 Nucleotides)

GRATATITI TOTCITCICI TECTECTICI ASGATATIN ATCCTTGACI TIAGGGAGIT TGATTATNAA ATCCCTTGAG
GRAGATATITI TNGGGITAAA TOGGCITGGN GITCICTAAC ATTCTTATAC TIAGATATIG ATATCTCCTT CTAGGITTGG
GAAGATCTCC GITGCTATTC TITTGAATAA GCTTTCTACC CCATCTCTT CTTTATCTCC TCTTTACAGC AAATAAAGIT
TTAGANITGC CATTTINAGG CTATTTTCTA GACCCTGTAG G

SEQ ID NO:854: (Length of Sequence = 255 Nucleotides)

TCTGTCCAGG ATTATTACCA GCTAAACCAN GTAATGGAGG TCTATGCCTG ATGAAGAACA CCTGTAAAAAG CTGGAAAATG
TGGCTGTCTT CTCAAATGGG CAGATACCAG CACAANGATA CAAGGATTGT AAAGACTCAG AATCATGTTA CTTCCAGAAG
AAACTANATA AGNTCCAACA ATGAACACAA NATAATANAA CTNAAGGANA TTTGGANAAC ANTGCATAAA CAAAACAAGT
TTAATGAATG ATTAG

SEO ID NO:855: (Length of Sequence = 333 Nucleotides)

ATAGCTGTGG TGGTAACCCA CCAGAGTGAG CATGCTINCT TCINAGGATA GACGTTGGGT AGTGGGATTG GGGAGAGGCA
GGACAGAGGC TICCGTTGTG TCICTCIAAT TCATTGTTTC TTAAAAAAGGA TTTGGGCTTA CAAGTTTCAA ATACTAAGAT
TTAATAAAGT CACATGGATT TTAAAAAAATC ACTCTATTGT ATGTTTGAAA CATTCCATAA TTTAAATAAA AGGATTGGTA
TTATATATGT NCTTGAGTTG CTATAATGTT TTACGGTTTT CCTTTGCTTC ACTTTTGAAT TNINCGAGGA TCTCCTGGGG
GAAGNTTCAG TCG

SEQ ID NO:856: (Length of Sequence = 230 Nucleotides)

TTINAGACAA AGTOTIGCTO TIGICACCCAG GOTIGGAGTIGO AGTIGGOGCAA TOTOGACTOA CTIGICAACCTO CACCINCTIGG GITCAAGCNA TICICCTIGCO TOANCCACCO AAGTIAGCTIGG GACTACAGGO AOGTIGGCACO ATGCCTGACT AATTITITIGT ATTITITITIA GITAAGACGG GGTTTCACCG TIGITAGCCAG GATGGTCTCG ATCTCCTGAC CTCATGATCT

SEO ID NO:857: (Length of Sequence = 334 Nucleotides)

AAAAACAATT AGTAAAAATT ATGCATTAAG GAATTATTTA CTAGACTTTC TGGAAGTAAA AAATAAGTCA GCTGGTTTTC
CCTTTGANIT CCTATATATT AAGGCAGAAT TCTCTATACT GTCCACCAAA ATCATAGTTA CAACTGTTTA CTTGAAATGA
TTTATATACT GCATTGACCT GGCATGTTAA TATTINCCTA TAAATATCAC CACTTATCCC CATGCCCTAA AGCAGTTTTT
TTAAACCCAT TCTTTCTTGG AGAATAATTA TAATACCTTA AATACAGAAC TTTGGGTTTC TGATCTTGCC ATAGCCATGT
AGCACAGCCA CTGA

#### SEQ ID NO:858: (Length of Sequence = 301 Nucleotides)

GGAGAAACGC CTAATGTAGA TGATGGGTTG ATGGGTGCAG CAAACCACCA TGGCACGTGT ATACCTATGT AACAAACCTG CACGCTCTGC ACATGTATCC CAGAACTTAA AGCATAATAA TAAAAAANTA AGAAAATGGA AATTGATTTT AAAAAATTTTT ACAATGTGCA TCAAAAGACA ACATTAAGAA AATTAACAGA NTGGAAGAAA ACATTTGCAA ATAATTTATC TGATGAGGGT TTAATATCCA GAAAATATAA AGANCTCCTA CANCTCAACA GCAANAAAAG ACAACCCNAC T

#### SEO ID NO:859: (Length of Sequence = 332 Nucleotides)

TGTCCTCACC CATAGAGCTA TCAGAGGGTG CCTGCNATTG GCAGACCCTT TACATTTCCC TTTAATAAAT CACTTCCCTG
CCAAGATCTC TGTCAAGGTT TGAGAAGTCA GAGCATTAAG TTATTINCAA TAAATGGTAT GTACATGANC ATCAGCAAGC
TCCAAGAAAT GACTCGAGGG CCTTTNACTA CTCAGAGAAT AAAGCAAAAA TGCCAGGTTT TCAGTGCTTG TCCTTTGTGC
CAGGGATTTG GACGTGTTTT TTGTTAAGIN CCAGCGTTGA GCTATGTTCC AGAAGATGGA GCCTTCCAGA AATTAATTGT
AGTGCTTGAA GG

#### SEO ID NO:860: (Length of Sequence = 233 Nucleotides)

AAACENTATG TGATTTTAGC ATTACAACAG TAATTCAGAA ATATCTCANN TGTTACATTG ATGTCATCAN TATTACAAAA
AAGGAAAAAA AAGTGACAGG CAACAGTGAA GAGCACCAGA GACCCAGCGC ACACCTAAAG TAGACCATGC TTCTTTCCTT
CCACTGCCAG GTTATCGTCC CGGGAAGCCC CCCACCCCCT CGCT\_TCCTC CTCCGCTTTC CCTAAAAAAAA NNG

### SEO ID NO:861: (Length of Sequence = 327 Nucleotides)

GGGCAGGIGI CAGCGCCCGI TICACCGCCA CGICGCGGAC AIGGIGATIT CAGAAAGIAT GGATATACIC TICAGAATAA
GAGGAGGCCT TGATTIGGCT TITCAGCTAG CTACTCCTAA TGAAATITIN CTCAAGAAGG CACTGAAACA TGINITGAGT
GACCIGICAA CTAAGCTGIC TICAAACGCC CIIGIGITICA GAATITINCCA CAGITCAGIG TATATATGGC CTAGCAGTGA
CATAAACACC ATTCCTGGAG AACTGACTGA TGCTTCTGCT TGTAAGAACA TACTGCGCTT TATTCAATIT GAGCCAGAAG
AAGATAT

#### SEO ID NO:862: (Length of Sequence = 378 Nucleotides)

AATCAGGTCC ACATTGTTGT CCTGGATGCT GAGTTTGCTG AGGGTTTCCA AGACCAGTCT CTGCGGGGAA AGGACGGCAT
TGGGGCCCAG GGTGGAAAAG GGGTCCTGGG CTTCANCTGA AGGGCAAACT GCCCAGTGTA GGAGTCCGTC CAGGACAGGC
AGGCAAATNC TCTCGGGGTA TGGAGATAGG TCCAACTGCC CCGAGATGTT GGGGCCTGTT ACCAACGTGT TTTCCCGGAG
CATCTCCAAG CAGTCCCACC ACCACTCCAC TTTTTTGCAG CTCACCCCTT GGGTCCTGTT CCTNCTCCTT TTCATAAGTT
AGTGGTGCCT GCTTTCCGGT TCTGGGTGCT TTGTGGGTGC AGCAAGGATC AAGCTTTG

### SEQ ID NO:863: (Length of Sequence = 374 Nucleotides)

TCAAATTAAT GETTITATIT CCATCTGTAA CACTAGCAGA GGAGTCCAAA GCAGACTGAT ATCCATGGAT ATAGTITAAA
TGTAACAAAG AAAGAGTTGA ACTATGTACA TTGAAAAAAG GAAAGACATT TTTNCATACC AACCTTTCCC TAGTICGCAG
TTTCTGAATA GTAGAAACAA AACACATTTT TAAATCTTTC TATCAATTTA ATTTAGGACG AAGTAACACA ACTTTTTATAA

TTAACCACTG AAGINGTCIT TAAGGACAAA ACITAAATTT TAAAATGGGT GTTACCATAT TINATGAGTG GACTGACTCC
AAGGTTGCCT TGCTCCAAGN MTGGGCATCG TGACATTGCC GTGATGCCCA GAGG

SEO ID NO:864: (Length of Sequence = 223 Nucleotides)

AAGGGGATAG AGCAGACACT CCGCAGGTNT CTTGAGATTA TCATCCGCTG AGGGTAGAGC TGAGGGTGGA AGGGGAGTNA GCAGACACTC GGAAGGTGTC TINAGGCTCA GGGAGTTATC AATTATAGAA TGTTGTTGAG TTGGAGGAGG TGGCTGGTGG CCCATCCTGT TTTTTAAAGT TTCANCTGTG AGGTAGGGCC AGTAGGGCAA TCCTGAAGAA TGG

SEO ID NO:865: (Length of Sequence = 228 Nucleotides)

GAACCOGGGA GCCAGAGGIT GCAGTGAGCA GAGATCACAC CACTGCACTC CAGCCTGGGC AACANAGCAA GACTCCGTCT CANAATTTTN CCAAAATCTG ACGGAAAGAA AAGAAACAAA TOGTTCAGAT GGGACGAGG GTGGGGGGAGGGT GAGTAGGAAC CAGGAGGGCT GCCTGGGGTG GGGGAATAAN TTAAAAAAAG GAACGAGTTA ACAACAGC

SEQ ID NO:866: (Length of Sequence = 328 Nucleotides)

GCACCACGTC AGAGAGGCCC CAGGCCACTG AGCCCGGGAG GAGACCCAGC CGGCCAGCCA GATGTGTGCC TGANTGCCAC AGACTTCAAG CAGTTTACAA ACGAAACTCA CTGTTAAAAG CTGTTAAATC TCATTAAAAC AGTAGACGAG TGCTTTAGAT TCTCTGAAATA TCAAATAATA TATACAGATA GACACTGAGA CATGACAGTC TAATCTAAAG CATCTTTACA GATGCATTIN CTTGAAAAAGT TAGTCTTCTT TTTAACTCTG AATCAGTGAT AAAATTGTTA ATTTGCAAAA GAGTACAGTT TTAAGCCAAGA NTAGAGTG

SEQ ID NO:867: (Length of Sequence = 361 Nucleotides)

GITTCATGGC ATGINAAAAT TATGTGAAAT TCAAATTTTA GTGTCCCCAG TTCTACTGGA ACGCAGCCCC TATGTGGTTC
ATGINTTGCC TCCAGCTCCT TTCACACTGC AGCAAAGCAG GGAGTGTAAC GTACACCCCA CGGCCACGGG GCCTAAAATA
TTTCCTATCA GACCCTTAGA GAAAAATATG CCGACCTCGG ATGTGACTGA GGGTGGGGAC TTGGGTGAAT GCCGGCCAGG
AGTGACATCA AGGGTTTGAA GCAGACCCTC TGTCCAGGAG GGAGCGGAGG CAGAGCAGGG ACAGTAGTNA GGAGGCCATC
TGTGGTGACT TAGGCAAGGT GAGGAGGATG TAGGAGGCAA G

SEO ID NO:868: (Length of Sequence = 364 Nucleotides)

AAAGCAGCCT TCAGGCTACT CTCTCTTGGN TCCTTGCTCT GGGGAAGAAC ACTCAAGCAG CTTTAGAAAA AGTCCACGTG
GCAAGGAATT GTGGTCTTTT GCCAACAGCC ATGTGAGTNA TCCATCTTAA GAGTGGNTCC TCCAGCCCCA GTAAAGTGTT
CAAATGACAG CAGCCCTGGC TAACATATTG ACTGCAACTT CATCAGGGAA CTTGAGCCAG AAAAACTCAG CTAACCTGCT
CCTAAACTTC TGACCCACAG AAATGGTGAG ATAATGAATG CTTGTTTTAA GCTGCTAAGN TCTGGAATAA TTTGTTATTC
AGCAGTAGNA TAACTAATAC AANGCCACCC AAGNATCATT TCCC

SEQ ID NO:869: (Length of Sequence = 383 Nucleotides)

AGCGACAGAC AAGTGAGCAT CACTACCAGA GCTCTGCCTC CTGTCAGATC AGTAGCGACT TTAGATTGTC ATAGGACCAT
GAACCCTGTG CATGCGAGGG ATGTGGGTTG CACACTCCTT ATGAGAATCT AATGCCTGAT GATCTGAGGT GGAACAGTTT
CATCCTGAAG CCATCCCTGT GCCCCTACCT GTGGAAAAAAT TGTATTCCAT GAAACCAGTT TTTGGGGCCCA AAAAGATTGA
GGACCGCTGC TCTATAAGAA ACTATTACTG AAATAAGGTA TAAAGTCTTT ATCTTACTTA TATTTATATC CTCTATGGTG
TCCACACACA AGGTGCTTTT TACACTTAAG TTGTTAAACT AAAATATTCC TTTAAACTTT AAT

SEQ ID NO:870: (Length of Sequence = 409 Nucleotides)

5

CAGCTITICA AATCAATAG AATTCATTIT GCCTCCNCIN ATCITACAAC TATTCTCTGG AGTAGGCAGG CTGGTTGAAC
TTCAAGAGAA GAGGCGITCC TGAGAGCCTC CTTGGTGAGC TTGCACACCT GGGGGCCAGA TGINCTITICC CCTCCTTGCA
AAGCCTCTCT AGTCTGGTGC CCAGAGAATA CAGCTTCAGC AGCAGCTCAC TTTGCTTTIN AGTTTAGATG AGAAAAAACA
GCAAAATAGT CCATCAAGGA CAAATTCTTG CCAATGGATT TNCTTTTGCA AGGANGTTCA CCTTTGNNCC TCAAGCATCA
TCTTTAAGTT GTGAATGCCT GATGGGAGGT CCAGGTTGCN CTGTGGGAGG AGCTNGGGGT GCNTTCCAAA ACCACCTGGG
GACCAGTGG

# SEO ID NO:871: (Length of Sequence = 290 Mucleotides)

TCTTTGCATT GATAGATTAG TTATTTATGC CAGINGICIC TGTCTGGCTT GTTTTGGTTT TNATTGCATT TGTTTGCTAG
AGATTCGTTT TAGTTTINCA ATTTCTTTCT CTGTACACCT GCCCCTCCCC CACCCCACCA CTGGGTTACT ACCTCCTTTT
TGGCACTACA TGATGCCTTA AGCCCAGGNT TGCCTAAGCT TTCATAACAG ATCCCAGCAC TGCTCATCCC CAGTGGTGGA
GGINCTAAAT GGGATAACCT GATAGTGTGG GAAGGCTGGC TGGGGGTTGT

## SEQ ID NO:872: (Length of Sequence = 313 Nucleotides)

AAAACAAAC AAATTTAAAA GCACTCAAAA ATAACCTCAA AAAGAGACTA GTGAGTGTCC CTTAAGGAAA GCCCTTCCTG
CAGATTCCCA CAGAACTCGG CCCAGGCACT TAACCTCCAT CTCAGCTCTG GTACAGCTCA CTGCGTACAG TGTGTACCAA
ACTCTTATGC CTGGACTGCT GATAAATTCT ATTTATCTCT GAACCTCAAT TTATTCAAAT CTAGTTATGA TATATCATAG
TGCTTGTAAA TGTTGTAAAA TATAGANGTA ACATACAGCA TGTGTCTACA CGNTTAATAA ACTGGTGCTA ATT

### SEQ ID NO:873: (Length of Sequence = 300 Nucleotides)

### SEO ID NO:874: (Length of Sequence = 364 Nucleotides)

GAGTCATTGA TECTGAGAGA TIGINAAGAA TATACTGACA GCATCCTTGT AGCTGCATCA CAGTAAATCG GACTTCTGAA
TCAAGCAGCC CAGCCTAGCA GCTGATAAGA GTGAATGTAG GTGAGAAGCA TTACCTTATT CCTGTAACAA GAGAACTGTT
TTGTGATAAG TGAAACTAGG AATGTAGAAG AAGAAATATC CTATGGCTAT TATAAAAGAN GAAGGACTTG CCTGANTGAC
TTGGTGGTGC ACCAGAAAAT AACTTTCAGA AGAATGCTTT CTGTTAAGCT GCTGCATTGT TCCTGGAGGA AATGTTATTT
CTAATGCATG TTATTTCTTC AAAAGATAGG ATAACAAAGA ATTG

## SEO ID NO:875: (Length of Sequence = 341 Nucleotides)

ATCAGTCCAA TECAGATTAG TATCACTITG CTCATAAAAG AGAGTATAAA GGITCITGAA GITTITGAAA GGAGCGGCIN AGCTGACTGT TAAGGAAGCT ATCTTTGTC TACAAGAAAT TTATACTITT CCCTTCTAAA TTTCACAAAC AGAATATTAT TAGAGACAAC AGAATACATT TACAAAAAATG GCATCAGAAA TAATTGANTA CATTGTGTAC AATATCTNCT ATTAATGAAA TAAATGTATA TTTNATATGA TATTTGGTCT TTATGGGAAA ANTAATATAA TTNCCAATAT TCTAAGGNIG ANCAAAGNIG GTTTACAAAT AGCATGCAAG G

## SEO ID NO:876: (Length of Sequence = 327 Nucleotides)

GTTTCANCTI GIGGGICAAC TICIAATATI IGATGGIGGC TACACIGIGA CAAGAAAGGI TITINAGCII GIIGGGGICA GIGGAIGGGC ACAAGGGCAC CCAGIGGIGG IGCCCCGCNCC AGGGAGGAGA ATACATIGIA GAATATAAGG TITIGGAAGTC AAATTATAGI AGAATGIGIA TCTAAATAGI GACIGCIIIG CCATTICATI CAAACCIGAC AAGICTATCI CTAAGAGCCG CCAGATTICC ATGIGIGCAG TATTATAAGT TATCATGGAA CTATATGGIG GACGCAGACC TIGAGAACAA CCIAAATTAT GGGGAGA

SEQ ID NO:877: (Length of Sequence = 404 Nucleotides)

ATTIGECTCC TGAATGITGC AGAAAACTGG TTITGTACAC TGGGGAAGGA GAGAGTGAAG ACCCTCCAGT TGGITCCTCA
GICAGCTCCG TTCTTGGIGT CGCTTTCTTG CAATTITTIT CCTCCCCTGG CCCTTCCTGT GAGGGTTAAA AGGGCCATCT
CCAAGCCAGG TGGAGCCCCA ATCCCATTGA CCAAGAGGGC AAGGTATGGG GTCACCTTCT CATGGAAGCC CTCTTCCTAA
AGGAGCCCAA AGGGGACACC TGCAGAGGGC GGGCTGTGAT CTGTGTGTGA ACTTCAACAA AATCTCAGGT TAGTATTTCT
CCAATTTCAG TTGAACCACG ATGTGGTATA CACTACAAAA TGCAGATTCT GGTGCCCCTC TCCAAGAGTC GGCCTCAGTT
AAAA

SEO ID NO:878: (Length of Sequence = 340 Nucleotides)

TGTACCECTG TECTGTTECC ACGAACACCT TCAGOGACTG GAGCTECTTT TATCCTTEGA AGAGTATTCC CAGTIGAAGC
TGAAAAGTAC AGCACAGTCC AGCTTTEGTT CATATTCAGT CATCTCAGGA GAACTTCAGA AGAGCTTGAG TAGGCCAAAT
NITGAAGTTA AGTTTTCCAA TAATGTGACT TCTTAAAAGT TTTATTAAAG GGGAGGGGCA AATATTGGCA ATTAGTTGGC
AGTGGCCTGT TACGGTTGGG ATTGGTGGGG TGGGTTTAGG TAATTGTTTA GTTTATGNIT NGCAGATAAA CTCATGCCAG
AGAACTTTAA AGTCTTAGGA

SEO ID NO:879: (Length of Sequence = 372 Nucleotides)

GAAAAGATAA TGAAGGAATA ATGCAAAGCT GAAGGCTGTG CCAGATGTAA GAAGTGATTA TGAAGGATAA AAGAAAAGGG
CTTTCCAAGC AGGGAAGAGG CATCAGAGAG AAAACCAATT GTTGAGCCAG TATTCTGTCA CAGGGACATT TGTCTTTNTC
CTTTAATGCC CAGTAAGGGT CTTCTCAGGT TCCATTAAAC ATGCAGAATC ACAAGACCCC CCCAAAGTTA CCATGGTGCC
AACCGACTCA AAACAATACA GACAAGAAGC TCAGCTCATC AGGAAGGCTG CAGCAGGCAT ATGGGAACCA TCTTGCTCCA
CAAAGGACAG CTNAGATGGC AAAGATCCCT ACAAGGGTCC ATATCCACGG GG

SEO ID NO:880: (Length of Sequence = 405 Nucleotides)

GAGCTAGGCA CCAGGCATTC TGTGAGGCCC CAGGAGTITA AGAAATGAAT TAAATATTCT CCCCTGCCCT CTTTGAACTG
ACTCTAACGA GGAGACTTAA GANTTATTTT GTAATCTCTA GTTATATTTN CTGAATTTCA GAGCTTAAAT ATTATACTTC
AACATGAGTC ACACCTTTAT TTATATGTTG GTTTGTCTCA GCTGTGTTGT GGGTTGGTGG AAGGAGACCA CACATACATA
CACACAGAGT ACATACATGC TGTTGATGTT ACACACATAC TCACACCCCA CAAAGTGAAG CTCCATGCTC ATTTTGTTTA
ACAAAGACTA GAGAGGCCTT GCAGACAACA GCTACCTGGA GCAGGAACAA GTGAAGCATG TTTCTGAACC ATTTCTCAAG
TCACA

SEQ ID NO:881: (Length of Sequence = 336 Nucleotides)

Ť

GTCTTTNCAG TCAAAAGTCC TTGAAGCTGG GACCCTTGA AAGTCTGTCA GTTACATGTT GTTGGTAGTG GCTTGTTTTG

ACCGTTTCAA AAAAGGAAGA AAAAACCACT TAAATCATTT TTCCTTTCTC TTTTCTACTG CAAAGGCCGA CGAGATTGAA

ATGATCATGA CGGACCTTGA AAGGGCAAAC CAGAGGGCAG AGGTGGCTCA GAGAGAGGCG GAGACCTTAA GGGAACAGCT

CTCATCGGCC AATCACTCCC TCCAGCTGGC CTCACAGATC CAGAAAGGCA CCAGACGTGG AGCAGGCCAT AGAGGTGCTG

ACCCGCTCCA GCCTAG

SEQ ID NO:882: (Length of Sequence = 369 Nucleotides)

TGCCATTAGC AACACTGITC AGATGAGATA ATTAAGAAAA AAAGCCAATT GAATGATTGA GTGAATGANT GATTGAAAAT
CTTTCCGAAG TTATAATAAT AATTGIGATT ATTGGGGTCA AAGCAAAACC ATTTTAGTCT AAAAGATTGT ACACTATACC
AACTTTTACC CAATTTGGAA TGAAAAAATTA CATTTCCAAA CCATGTAGAA ATTCTGANCT CTTTGAAATA TTTCCTTTTG
TGGGAAAGAA CCAGAAATTC TTTGTCATAT GTACCCATTT ATCTTATTTN AGTTACCCAA CCAAAAGATA AAATAATATT
CTCAAAGAGA TAATTGACTG GAGGAGTTTA AAGTGTTTAT AAATATTAG

#### SEO ID NO:883: (Length of Sequence = 369 Nucleotides)

CTGCCATAAG AATATCAGCC TGGGGGCAGT CCAGACGCAG CCCTTTGICA TCCTTTCTGT TTGCCTAGTC TCAGCAGACT
GTGATCACAA GCCATTGICT GTGGGATTIT NCCTTTCCCT TTCTTGATCT CTCTTGTGGT TCTAGGTTGT TTGGTTGTTC
ATTGTTATGG TGGCTTTTNA TTTTAACGCC CCTTGAGCCC CATGATGCT GGTGTCACCC TGTTCCTTTA CACTGTTGGG
CCAGGTGCTG CTTGTCCTTC TTAGGGCCAT ATCAATTGCA AATATTTCCT TTTGCTCCCT TTATGAAGAT GTTCTTATAC
CCTTGCTTTT CCATATTTTT TNTGGGCCAA GCAATGCCAT CTNCTTTTA

#### SEO ID NO:884: (Length of Sequence = 327 Nucleotides)

AGITCATCIT TITCCAGAGG GGTCTGGGTG CCTTTAAAGG GGTGCAGGCC GAAGAAGATG GTGGCTTGGG GAAACTGGAG
CTGAACTTGG ATTCAGAACT CTGAGGCACC GGGATGGGGA TGGGAATAGG GACTGGCACA GGCAAGGGGA CGATTACAGG
ATTACGGCACC AAGAGGGTGG CTGGTGGGAC CAGGGGGGAC AAGGGGGAGC TAAAAGGCTG TGGGGGCACA GGGGCATAGC
CAGGAGGAGG CTGACAGGGT GGGGGCCCGA GAGTGCCCTG GGAGGGAAAC AAATTCTTGA GCACAGCTTC AAATGGCAAA
GTGGGCT

#### SEO ID NO:885: (Length of Sequence = 380 Nucleotides)

CCAAAAGCIT ATCCACCATG ATCAAGIGGG CITCATCCCT GGGATGCAAG GCTGGITCAA TATATGCAAA TCAATAAATG
TAATCCAGCA TATAAACAGA ACCAAAGACA AAAACCACAT GATTATCTCA CTAGATGCAG AAAAGGCCTT TGACAAAATT
CAACAACCCT TCATGCTAAA AACTCTCAAT AAATTAGGTA TTGATGGGAT GTATCTCAAA ATAATAAGAN CTATCTATGA.
CAAACCCACA GCCAATATCA TACTGAATGG GCAAAAACTG GAAGCATTCC CTTTGAAAAC TGGCACAAGG ACAGGGATGC
CCTCTCTCAC CACTCCTATT CAACATAGGT GTTTGGGAAG TTCTGGGCCA GGGGCAATTT

### SEQ ID NO:886: (Length of Sequence = 400 Nucleotides)

GGGATGACTI TAAACGAGAG CTGGACAGTA TTACTCCAGA AGTCCTTCCT GGGTGGAAAG GAATGAGTGT TTCANACTTA GCTGACAAGC TCTCTACTGA TGATCTGAAC TCCCTCATTG CTCATGCACA TCGTCGTATT GATCAGCTGA ACAGAGAGCT GGCAGAACAG AAGGCCACCG AAAAGCAGCA CATCACGTTA GCCTTGGAGA AACAAAAGCT GGAAGAAAAG CCGCCATTTG ACTCTGCAGT AGCAAAAGCA TTAGAACATC ACAGAAGTGA AATACAGGCT GAACAGGACA GAAAGATAGA AGAAGTCAGA GATGCCCATCG GAAAATGGA ATGAGGAACC CAGCTTCGCC GACAGNAGGC TTGCCCACAC TGATTCACTT TCGGAGATGT

#### SEQ ID NO:887: (Length of Sequence = 363 Nucleotides)

TAAAATAAAT GCTCTGGATG GGAGAAATGT GGAAGTTACT TTGGAACTGG ATAATAAGTA AAGGCTGAAA GAGTACTGAT ATACATGCTA AATAAAACCA ATATTTCCCT GAATGANCTA TTCAAAGCAA TTCTGGTGGG TGTTAGACAG GACATAGAGA CCTGGAGAAG AAGCTCCCAT TTTCATAAAG AACACAAACA ATCATGTATA GAATGTTGGT AGAAATATGA ATGGTGAAGG TCAATGTAAT GAAGTCTTAG ATGGGAATAA GANAGGTTAT TAGACAAGGG AGAAAAGGTA ATCCTTGTTA TAAAGTGGCA AAGGAACTTG GCCTGAATTG TATTCATGTN CTAGTGCTTT CCT

SEO ID NO:888: (Length of Sequence = 318 Nucleotides)

SEO ID NO:889: (Length of Sequence = 349 Nucleotides)

ACAGAAATCI ACGIAGACIT CINCCAAATG CCACATGAGA GCAGTGGCAG AATACAGAGA GACCGGCGAC CACAGCAAGG
AACTGTAACG GCCAACAGTC CTCAGGCATG CAGGCCTGGG CCAACAGCAC AACGCAGAGT CGCTTCTTCT CAGTCCAGCA
ATTAAAATGA CCATGCCAGC CAGGGTTTCA TTAGGTTACT TTCAAAAAACC ACCTTTGCTG GAAAAAATGT TTGGTAGTTT
AATCTGCATA TACGGACAGT CATGCACCAC ATAATGATGT TTAGGTCAAC GATGGACCAC ATATTCAATG GGTAGTCCCC
TAAGGTTTAT AACCAGCATA TTTTTTTACT

SEQ ID NO:890: (Length of Sequence = 341 Nucleotides)

GINGIAGGG TICGIAGGIA GGGCIAGIAG GIAGGGITAG TAGGIAGGCC TAGIAGGIAG GGCTAGIAGG TAGGGITCGIA AGGIAGGGIT CGIAGGIAGG GITAGIAGGI AGGGITCGIA GGIAGGGITA GIAGGIAGGC TICGIAGGIAG GGCTAGIAGG GTAGGGCCTAGIAGGC TAGGIAGGCC TAGIAGGIAGG GCIAGIAGGI TAGAGCCTAGIAGGC TAGGIAGGC TAGIAGGIAGG GCIAGIAGGI AGGGITCGIA GGIAGAGCIC GGIAGAGCIC GGIAGAGCIC TAGAGCACCC GGIAGACCCIC GGIAGACCCIC GGIAGACCCIC TICCACCCC GGIAGACCC TICCACCCC GGIAGACCCIC TICCACCCC GGIAGACCCIC TICCACCCC GGIAGACCC TICCACCCC GGIAGACCCIC TICCACCCC GGIAGACCCIC TICCACCCC GGIAGACCC TICCACCCC GGIAGACCCIC TICCACCCC GGIAGACCCIC TICCACCCC TICCACCC TICCACCC TICCACCC TICCACCCC TICCACCC TICCACCCC TICCACCC TICCACCACC TICCACCACC TICCACCAC

SEO ID NO:891: (Length of Sequence = 344 Nucleotides)

GACCTGGCTG CGCACCAGGA COGCNTGGAG CAGATOGCCG CCATTGCCCA GGAGCTCAAC GAGCTGGATT ACTACGACTC CCACAATGTC AACACCGGT GCCAGAAGAT CTGTGACCAG TGGGACGCC TCGGCTCTCT GACACATAGT CGCAGGGAAG CCCCTGGAGAA AACAGAGAAG CAGCTGGAGG CCATCGACCA GCTGCACCTG GAATACGCCA AGCGCGGGGC CCCCTTCAAC AACTGGATGG AGAGCGCCAT NGAGGACCTC CAGGACATGT TCATCGTCCA TACCATCGAG GAGATTGAGG GCCTGATTCT CAGCCCATGA CCAGTTCAAG TCCA

SEQ ID NO:892: (Length of Sequence = 367 Nucleotides)

CTGGGCAACA TGGTGAACCC CATCTCTGCT AAAATACAAA AATTAGCTGG GTGTGGTAGT GCCTGCCTGT AATCCCAGCT
ACTCGGGAGG CTGAGGCAGG AGAATTGCTT GAACCTAGGA GGTGAGGTGG AGGTTGCAGT GAGCCAAGAT AAAAAGAGTG
AGACTCCGTC AAAAAAAAAAA AAAAAAAATA TATATATATA TATATATATA TATATTTNEN CTCCAATCCC ATCTAGGTTG
CTGCAAATGC CATTATTTCA TTCTTCTTTA TGGCTGAGTA GTTTTCCACT GTGTATGTAT ACCACAGTTT ATCTTCTTGT
TGATTGATGG GCGTTTGGGC TGGTTCCACA TTGTTGCCAG TTGCAAA

SEQ ID NO:893: (Length of Sequence = 220 Nucleotides)

GCAAAATATT TAITCCAAGI TAGITATTIT AIGCAGIAGI TICCCCCICG AGACTIGIGA TAACCACATC TITTAAATCI GIAAATAATG TIATCAAAAT AATCITAATC TITGAAATCI CACAAAAATT TATATTITAC AATCCACCCT GAATATCAAG GCIGCAAGAN TAACACAACA TITCCTATAT CCAAATATTI TACAGCIGIA CCCAAAAAGG

SEO ID NO:894: (Length of Sequence = 313 Nucleotides)

GGGATTGGGA TTGTTTGGCT CTGAGGCTGT TAAGTCTGGA CTGATGCTGG AAACTAATAT CAATGTTTAA CAGGGTTGAC TGTCATTAAT GATGTGCCTA GCTGTGGGTA CAGATGCTTT GCACATTACT ACCCTCTATT CTCACAATCT TCCATGGGG ATGTATTAGA ATCCCCTTTT ATAAAGGATA AAGGTGAGGG TCAGAGAGAC TAGGAAGCCT GINCAGGGTG ACACAATACA
AAGTGTCATA AATTGGGTTT GTACTCAGCC ACTCTGCTTA TTAACATCAG CAGTATGGTT AATGGGGTGA CCG

### SEO ID NO:895: (Length of Sequence = 304 Nucleotides)

GGICIAGATI CAGITATGAA TGTAGGCAIT AGITAAAATI AACAAGATGC AGAGTATTAA TITCTIAAGA CAACAAAGTG
ATTICTGTAA GITTGAGCCC TATGTGGAAA GCATTGTGGA ATCITAACCT TTITGTACAC ACTCTTGTGG GACGTATCAT
ATAAATGTCA GCACTAAGTA ATGICTTGTT TGTGGCTGAA TATTTINCGI AGATGTTTTT GAAGTTGACA TGACTTACGT
GCATTTAAAT ATATATTGCC ATCCCTTAGT TTGTAATTAA GGATTINGGA ATATGGGTTG TGGG

### SEO ID NO:896: (Length of Sequence = 337 Nucleotides)

GCAAAGIATI TCATCATATG CATGIACTGI ACCTIATITA GCCAGCCCCA TITITGITTGG CTTGTGGAGA ATTACAATAG CTGTTTTGAC TGTTGTATCA CATGCCAGGC ACTGTACTGI GTATTATCTC ATGTAATTCT CATAGTTACT GCATGGTGTA GGTATTTTNA TCCCCAGTTT ACAGGTAGAG AAACTGAACC CAGAGATGIT AAATAATTTG CCCAAGTTTT TTGGCTGATT ATACTGATGA AGATACTGAT ACTAGCATTC TGTTGTCAGT TATTTGCCAG ACAGAATTCT TTATTTTTTA ATACATAATA TCCATTTACT CTTGAGG

#### SEO ID NO:897: (Length of Sequence = 316 Nucleotides)

### SEO ID NO:898: (Length of Sequence = 200 Nucleotides)

GAGATCTGGG GCTGGGGTAT GGATGATGGG GGGAAGGGCG GTCGCCTCTG CCACTGTCAG GGACCAGCCG GCCAACGCCC ACCCGNAAAG GTGTCTAAAA ANTINAGCTT TTCACCCACC TGCCCCTTTC TTTCAATCCC ACGCTGTTTC CTTTCAAAGT TCTGGGAGGA CGAACTCACC GAGGCGAGAA GTNTAACATT

### SEO ID NO:899: (Length of Sequence = 264 Nucleotides)

CTCTGTAAGT TAGCGGTCAT GTTTTCAGCC CCATGCAAAG GCGCAANACN TCAGACAGCG TGGTTCTNIN AACATNAGTG
TGTGGTGCCT CCCAGGAGCA GGGATTTNAG CNAGGCTGCT GACACATAAA CACACCCCCA CCTCCAGAAG CAGAGGAGAG
GAGCCCAGGG CCAGGGCAGG TAGCTCAGCA AGGACCCAGC ATGCINCAGG TGGGGCCAGT AAGAGTCACT TCTCCAGCNA
GGGTCAGAGA GGAGAGAGC AAGA

### SEO ID NO:900: (Length of Sequence = 265 Nucleotides)

GCAAATGGTA AAAAACCAAG TCAGCAGAAG AAATTAGAGG AGAGACCAGT TAATAAATGT AGTGATCAAA TAAAGCTAAA AAATACCACT GACAAAAAGA ATAATGAAAA TCGAGAGTCT GAAAAGAAAG GACAGAGAAC AAGTACATTT CAAATAAATG GAAAAGATAA TAAACCCAAA ATATATTTGA NAGGTGAATG CTTGAAAGAA ATTTCTGAGA GTAGAGTAGT AAGTGGTAAT GTTGAACCAA AGGTTAATAA TATAA

# SEO ID NO:901: (Length of Sequence = 381 Nucleotides)

CTTCTGTGCA TATAAAAGAG AACAGTCTGG NCACTTGAAA ACAGACACCT TCTGGTTTTC AATGTGTTGG TCAAAGTGGC GATACAGCAA GGTTTGCAGG GTGAACACAG TGTCGCACAT GGAACACTTA TATATNATTT TNGGTTCTCC TATCTTGATG

CCAGGATGCT GIGTGTAGGC GIGGGAATNT GTGCTTGGGC CAGACTTAAA CGCCATTGGA CAAATAGGAC ACTTGTAGAA GACTTCACAG TGAGAACCTT GAATNIAAGA CTTCAGAGCA GCCACATCAG AGTACACAAC CATTGCAAAT GCACCACATC GAAAACCAAC TCTCCTCGTG TAGTNCAGAC AGTTCTTTGT GGCGTGGGGT CTNGGAAGGT G

SEO ID NO:902: (Length of Sequence = 331 Nucleotides)

GGITGCCAGI GATCICCITI CTIATCACCI ATAGACAGCI IGCCIACAGG AAAAAAGAAA GCCAAACACA GACAAGCAGI ATGAGATACA ATGAGGCCCC TIGGGCCAIT AAAATATGAT IGINIGCCCA AGGICGCCIG GNCIGCAAAC AGCICTCCAG AACCIGCAGC CAGCACAGAC CAAAGICAGG TITGINICCI CITCIGITGA IGAACAAAGG TIGAITCCAT ATCGIGGCIA ITGIGAATAG IGGCAGIAAA CAIGGCAGIA ITGIATGAAA ATAINACAGA TIAGNCCCIT IAAATATGIG CACIATGGNI GATCIATCAA A

SEO ID NO:903: (Length of Sequence = 389 Nucleotides)

AGCAATACTA AACATAAATG TAAATTGGGC TAAATGCTCC CAATTAAAAG ACACAGAGTG GCAAGCTAGA TAAGGAACCA
AGAGCCATTG GTATGCTGTC TTCAAGAGAC TCATCTCACA TGCAATGACA CACATAGACT CAAAATAATG AGATGGAGGA
ACATTTACCA AGCAAATAGA NAACAACAAA AAATATTTCT AATAGATTTC TGCTTTTAAT AATGAAATAT GTCAAACTCC
TATAAAAAACT ATATGTAGGA AATATAAANG TTTATATATA ATTCATGTAA TGGNTAATAG TAACTGAATA GCTAGTATTG
AATAACCAAG CTTCCTTTTG TTGTTTTGNA CATTGGGNGNA ATTGAACATG CTTAAAGGTA TTGGGAAGG

SEQ ID NO:904: (Length of Sequence = 285 Nucleotides)

AAATCAAGGA COGGTTAGAT AGATGATGGG CTAGGCAGGT GGGGGAAGAC AGAGCTCACT GCCCINTGGG GTCTCTGTGG
GGCCAGCCCC TNATGCCCAT GTGGCCACTN ATGCCCAGCT TCCCCCAACA CCCCANCACA GGCCCAGGTC AATATTACAA
AAGTGAACAA ATGCAACCTG TTTCTGCTTT NACAAATGAC ATGTCTCCAT CCCCGGCCAG CAGGGGTAGG GGAGGNCGGT
TGAAAGTGNC ACTCCGGTTA AAAAGGCAAC AACTTTTATA AAATG

SEQ ID NO:905: (Length of Sequence = 374 Nucleotides)

GAAGCAAAAA GTIGAACCIT TIAAAGIGCT GAACACAAAT CCAAATTCGA ATGGTTCAAG CAGCCGTGAA ATCGCTCTTC
ATAAAGIGGG CITAATTCIC TAGTITAAGT TCTTTTGATG GAATGAATTA ATTAATGTGT CAGGTGGCTT ATTTGTGGAT
GCCATGATTG ATGATGTTCA TTTTAAGCTC TIACCTATAG TACAAGTACA TGATGCTACT GAATATTTTT TCCACTTGGA
AACTGTGAGC TGGGTTGTTG CATTAAAACA CACATACANA CANAATCANN AAACACTGCG GACTTTTCAC TCAAGCTGGG
TCTTTTCTTC CCCAGTGGTA AGGGCAAATC CTGGCCTANC TAACCAACAC CCAC

SEO ID NO:906: (Length of Sequence = 375 Nucleotides)

CIGACIGAAA GGCICITICC AGCICCAACA CAIGAAGGII CCAIAATITI CCCCAAAIGI CIGCCGCICI GAAAACIICA ACIAICIIAA TATIIGIGAC ATIIAIGCCI GIGIAIGGCA AICIGAIGGI AAAAGGAGCC AIAIGIAAAT AAIAACIGAA ACIITIGICAA AAIAAIGIIA AGGAAACATA AITAGCAAAG CAAIATATAA TINCAAGICC ACIGAITIAG AGAATCAGAA GIAACANITA GAATCAGAAA TAACAACIAI CIGGCAGGGA IGGAAAAAIG AGAGCAGATA TAAAAGGIGI ACCCCAACCC CIGACCCCAC IGCCCATIIG GGIGIGCACT AIGINITICC AAIATTAATA TCTT

SEO ID NO:907: (Length of Sequence = 390 Nucleotides)

GIGCIGACTI CAGCAGCCCI CIGAAAGGCC CCITCCATAA GCIGGGAAAG TATGATCATG GITICATCAT CCITGITGGT
TATTACTTCA AGGITGACCA ATCIGAAAGC TCIGIGIGAA GAAGGGGACT GAGIGGCIGT GAATGATGAG ACCGITGITIT
AAAAGCCAGG CTIAGCCTGA GGICCGGAAG AAGCAACCIC AATGCIGIGC TITTACCATAG CACCACCTGC AGGITATCCAG

GAATAGAGAA CCCAGCTGAG CGACTCATGC TTNACCAAAA ATACCCAGAG CAGTGTGTCT CTACCTTTTT AAGCCCATGC TCACTAGTGG GGAAAACAAT TTTACCCCCC TGTATTTAAA TATGGGGATT TCAAGGCAAA CAAAAGCATT

SEO ID NO:908: (Length of Sequence = 207 Nucleotides)

CTTGCATACA GETEGIAAGT TATTACATTA TTTCINCCTC CTGTCTACCT GCAGTTGGTT TTATGAGGGG CGTTAGTACA CTTCCCAAAG GGCTTGCCCG CAGGTTNAGA GGTGCACATT GAACTCCCTC ACCAGGCAGA TGGGAAGTGT GGCCATGAGA GAGAGCTTCA GGGGNCCTNG GNTTATNACA TCGCTGGGCC AGGANAT

SEO ID NO:909: (Length of Sequence = 339 Nucleotides)

GCAAGAGAAC CIGATATAAT ATCTATAAAT TITGATICCC TGGGGTATAA CAAGTAAATA ATTITTAAAT GGIGCITAGC AAGATIGGIT CATGGAAAAT GAAGCAATTA TGGCTIGANI TITATATGIAC AATATITATT GICTTAATTI TAATTITAAAA CGAATGACAT GICTCITTIT TITAAAAAAAAG TCTTCITTTA AAGATCITGI AGITGATGIG ATGAGCTATG CACTGCTAAA TATTTATCCA CACATAAATA TITGANAAGG AATATGGNAT AGICATGGGA TGTAGTITCA TCTCAGTGCI CCATGGAGGG AGIGITITCA CCCTCCTCT

SEO ID NO:910: (Length of Sequence = 372 Nucleotides)

CTCAACTGCC ACTCACCTAT CTACCATCCA CTACCCANIN ACCACCCACC ATGACCCACC ATTTGCCATC TACCCATCCA
TCCATTCTAT AAATAATTAG TAAGCACTTA ATGCATGCTA GGTATTATTT TAGGCACCAG TAAGACAATC ATGGGAAAAA
AAGACAGACA ACCCCCGACC CTCCCATCCT CAGGGAGCTC TATTCCAGTG AGAACAATCA ATGTGCTAGA TTGTGAAGGT
CATCAGTGCT TGCTGCCCGT GTAAGACTGA GGTTCCCAGG CCCGAGGACC AGNCTGGGCC AGGGCTTCCC AGGGGTCTNC
T....GGGGGA CTCTCAGGAG TCCAGCTGCT GCCCCTTAGC TNAGCACCTG GG

SEO ID NO:911: (Length of Sequence = 377 Nucleotides)

GAACTICAAA AAAAAAAAA AAGAGGAGIC ATAATAAATA TITINACTGIC TAGTCAACCI AATTIATGAA GCCTGATTAT
CTAGCINAGC CTCCGGAGAT TGCTACCGGA AATCICCCCA GATGITCCCC CTCTAACCC AACINICCAC TGINTGGCAG
GAAGGCAGCC GGGCATCTGC ATTCCGGAAG CCCAGCTGCT TGGGAAGAGA GAGGGAGCGG CCTGCACGIN ACTCAACAGC
CCTGCCTGCT AACCAGTTAA CCAGTTCTCA GTTGGGTTCA CGGACCCATG AGCGACCCAG CTTTCTTCCC CTCAGGTTGA
TATTGTGCTC CAAGCTNGGG GATGCCCCGG GGGACTATGT GGAGGGAGAG TTCCTTA

SEO ID NO:912: (Length of Sequence = 370 Nucleotides)

ACAATCTACT TGCTACAGAA TCAGGATGIA TTINCCTATI TATAATAAAC TACAGAAGGI AGATITCAAA GGTAATGGCT
GTTATGGAAA CCTACTTGAG GTTGTCTGCT AAAACCAACT CAGTGTGCAA AGCGAAATAC ATTINCTACT TCAATAGCTC
CTCATACTGC ATCTGTCTGT AGAGTTTATT TCAGTAAAAC TGTTTACTAT TTCATGATGA GTAGCTAGAA TTAAAGCATT
AAGTAGCTTG AGAAAATAAT CTATATAAAT CTTTATATCC TACATATGGC TATAAAAAATA AATTTATAAT TTTAAAAAATT
GTTTTAAATA AACATTTATT TTTTACCCTA CCAAAGTAAA GGGTATACAG

SEO ID NO:913: (Length of Sequence = 313 Nucleotides)

GTATCTGGTT GCCACATCCA AGAAGAACGC GTGCNTNTCG CTGGTCTTIN CTTTCCTCTA TAAGGTGGTG CAGGINTTTT CCGAGGTACTT CAAGGAGCTG GAGGAGGAGA GCATCCGGGA CAACTTINTT ATCATCTACG AGCTGCTGGA CGAGCTCATG GACTTCGGCT ACCCCAGAC CACCGACAGC AAGATCCTGC AGGAGTACAT CACTCAGGAA GGCCACAAGC TOGAAACAGG GGCCCCGCGG CCACCAGCCA CCGTNACCAA CGCGGTGTCC TGCNGGTNCG AAGGCATCAA GTATCGGAAG AAT

SEO ID NO:914: (Length of Sequence = 389 Nucleotides)

TTACAGGCGC CIGCCACCAT GCCCGGCIAA TITTINAGIAG AGATGAGGIT TCACCATGIT GGCCAGGCIG GICTCAAACI CCTGACCICT GGIGATCIGC CCACCICAGC CICCCAAAGI GIIGGGATTA CAGGGGIGAG CGACCGIGCC TGGCCITCIC CACTGITTIC ATAGIGAAGA AAGGACACCC AAATITIGAT CIGGITCAGC TATICACTAT TCTATCCIGI GIGGICITAA GCAAGITACA TAACTIGCT ATATCCAGT TTACTTAGCI ATAATATAAA TTAAATIGGT CAAATGITCT CIAAAGICIT ACTAGGITACC AGIGTTCCAT GGGCCCAACA GCATCTACAT TACCIGAGGA GGCTGGTAGG AAATGCAGG

SEO ID NO:915: (Length of Sequence = 328 Nucleotides)

CNCCAGCAGA TITINATIAG ATGGAAGATA ACAAGCATTA CCNCATAGGT AAGTGGTAAG AAATGGCAAG TACAGCCAAG CCACAGAGGA GTGAGGACAT TACTGGCTAT GGGAATGGGT ACTTATGAAA TCTAAGGGTT GGGTCTCCTG ATGAACTCTA ACTACCCAGT AAGCTCTTCT CTTTGGCACT CAATATGACC NCTGCTGGCA TGAAAGGGNC TACAGTAGCT ACTTTCAACT TGGCCAACAG TTCTTCCAGT TCTGGTCGAG CTTTGAATCG TCCCTTTGAA GTCTTTCTTC AGNTGGTGCT CCTTCAACTT GACAAGTC

SEQ ID NO:916: (Length of Sequence = 365 Nucleotides)

CAACTICAAG GIGCIGCAAG AGCITICAAG AAGAIGGGIG TIGACAAAAT CATICCIGIA GAGAAATIAG IGAAAGGAAA ATICCAAGAT AATITINAGI TIATICAGIG GITTAAGAAA TINITIGACG CAAACIAIGA IGGAAAGGAT TACAACCCIC INCIGGCGCG GCAGGGCCCAG GACGIAGCGC CACCICCTAA CCCAGTICCA CAGAGGACGI CCCCCACAGG CCCAAAAAAC ATICCAGAGCCT GCATCACCC GAAAGAACC CACTGAGACCT TGAIGCCCAA ATICCITIGAA CICAAACCAA CAGCT

SEO ID NO:917: (Length of Sequence = 400 Nucleotides)

GCATTATTIA TIGAAAACTA TGIATTITIT TGIAAAAACC TGATCACATA GAGAATATCA GIGGCTATAC CCICTCIGGG CATCAGITTC CICATCIGIA AAGIGGGGAT AATCACAGCC CCCACCACG TGGGCTCAG GGAGGAATAA ATGCATTAAC ACATGGCAAG TCAATTAGGA CGGIGCCTGA CAGGCTGTCA GCGCCCAAGG TTGIGACTIT TGCTTTTCCT ATTGCTACTC TGCAACCAAC TITAGATAGI GGIAGANIAA TCAGGAGGCC CTCTTGAATG GGATATTTTG CACAGAAGAG GTCCCAGACC GAGTGTGTGT GACATGGGAG CAGAAGACCC GGGGTTNAG CCAGGCTCTG CCACTCATAC GGTGTACAAT TTTCAAAGGG

SEO ID NO:918: (Length of Sequence = 348 Nucleotides)

CTATTGCACA TGGTAACTCT GTCATACATC TATAAAGCCT AGTAGCTGIA TTGGGTGAGA TGAAAAAAAC TGCTTATATT
CCACAGCAAC ATAATTACAA ATAAGTTTTA ACCTATTAAA GTACAGAGTC TCTCTCATCA CTTTCAAAGC AGGACCCTAC
TTACCAATAA TTCATAGCAT ACCTCCCCTT ATTTTAAAAC TCATATGATA GCTGATTTCC TAACTGTAGC AATCAGGATT
CTTAGAAAGA TTCGAAACTG AATTTAGCTA ACTAAGGAAG CGGATTTCAT TAAAAATATT GGGTTAGTTT ACAGGAATCA
GTAGTGGAGG AACCAGGGTT GCATAAAA

SEO ID NO:919: (Length of Sequence = 345 Nucleotides)

GGGATGACTI TAAACGAGAG CIGGACAGTA TITACTCCAGA AGICCITCCT GGGTGGAAAG GAATGAGTGT TICANACTTA
GCTGACAAGC TCTCTACTGA TGATCTGAAC TCCCTCATTG CTCATGCACA TCGTCGTATT GATCAGCTGA ACAGAGAGCT
GGCAGAACAG AAGGCCACCG AAAAGCAGCA CATCACGTTA GCCTTGGAGA AACAAAAGCT GGAAGAAAAG CCGCCATTTG
ACTCTGCAGT AGCAAAAAGCA TIAGAACATC ACAGAAGTGA AATNCAGGCT TGAACAGGAC AGAAAAGATA GAAGGAAGTC
AGAGGATNCC ATGGGAAAAT GAAAT

SEQ ID NO:920: (Length of Sequence = 299 Nucleotides)

CCCAGGIACI CAGGGAAGGG GCAGGAGAAC CACITGAGCC AAGGAGITCA AGGCIGCAGI GAGCIGIGAT CACACCACIG CATTCCAGCC AGGACAACAG AGIGACATCC IGICTCAAAA ATAAATAANI TITIITAATGA IGAAACIAAC TAAGGIACIG AGGAGGIAAG ATATTTCCCC ACGGIAAGIC ATICAGAAAC TAAATGIGAA AAACCAAAAG AAGCCICIGG GGITAGIATT CCCAGICTCC ITGICTGCCC AGGACCCCAC ATITGIGIAA GIIGCIAATI GCACAAGGG

SEQ ID NO:921: (Length of Sequence = 234 Nucleotides)

ATGAAGCAGA GGCAACCAAC AGAAATTGAC ATCAGAAACT CTGCTGGNTC CCCACCAGCA TGCTACCGAT GANTCCTGCT CTCTTTCAGA TGAAATTTTA TTTTTTTNCC AATAAGGCCA GCCCTACCCT GGAATCTGGA ACCANITCTG GCCCAGGGTA GAAAGGCTAC CAAGCACCTA TGGTAGAAGC CCTGGTGTCC AGGNATGCCT TGGNCCTTAT TATTGACCTT CTCT

SEO ID NO:922: (Length of Sequence = 328 Nucleotides)

TAGCAGGGIT ACTGGCCTTG GCTGCGGCCA AGGGAAAACT CTGCAGGCCC TATTACTTGG CGGCCTTTAA CTCTTATAGA
ATTGGGAGAG AACACTGACA AAAGCGAGGA CATGATTTIN CGGTTACAAA TNATTTTCCT TGCTTGCTTT CTTCTCACCC
TTTTNAATTT TCCTTTTCTN CTTTTCCTGT CTATCTTACC TTCCCTCCGT GATCCCTGCC AGCCCCTCCT TTCTTATTAT
AGCTGATCAT GGCAGTATTG TTTTTTNCTG GGTAAAAATC AGAGTGGGAT TTAGAGAAAG CTTAGCAGGC CTAGCATGAG
GGCCTTAG

SEO ID NO:923: (Length of Sequence = 371 Nucleotides)

CAGGAAACCT ACTGTGAAAA TGCAGAAAAA CAACAG: CAA AATTGATTGT TGACTCAATA TGATATATAG TTCAAATGTA
AACAAATGCT TGINAGCATT CCACATCACT GAAGGAAAAA AAGTAAGTTA TTATTTCCAA TGITGGGAGT TAGGTTGCTA
TAAGCTTATG ANCACACACT TTCAGTGAAT TTATGTAGAA TCGGAAGCAC TTCATTCTCC CCTCACCACA CATCACCCCC
TTGCTCCTCC TCGACACGTG CAAAATGATA GGGCATGGTA GGGGTTGTAG TGAAATNGAG AAGGCATGCC CCATCTCAAG
AAACAGGGTG GACCAGCCAC AGCTTTCAGC TCCANT: TT GATACAGGAA T

SEO ID NO:924: (Length of Sequence = ucleotides)

SEO ID NO:925: (Length of Sequence = 317 Nucleotides)

AATGCTTTAT GATCAACTIG CCATAGGACT GATGGATTAA CCAGTGTTCG GCTTTATTIG AAGTCTATGC CCTGCACAGC
TCTTGTATGT ATTINAGATG CTAGAAGTT TTINAGCATG TNATGTGTGA TTCTTGTTTG AATTCTAGGN ACCTTGTCCA
ACTTGGTTCT TTTTCAAGGT TGTTTTGGGT ATTCTGGGTC CCTTGCTTTT CCATATGNAT TINAGGATCA GCTTGTCAAT
ATCTGCAAAA AAAAAATCAG CTATATTTTG ATAGAGNTTT GTATTGCATC TTTAGGANTG GTTTGTTGAG TATTGCC

SEQ ID NO: 926: (Length of Sequence = 247 Nucleotides)

GITATICATA CCACAGCATI TAAAAAGCAA TCCGCAAGIN ATAAAAAAAA AAAAAAAAA ATGATGTGAC ATATCCATIG CCTGANITGC CICITITGIA AGCCAGINIT GGGATTATAG CAGAGGAGTA GCAGAAATAA NIATATICAG ACACAAACAT ATAGATATAA TAATATCCAA CCNCITTATA TGATTIAGGG TCTCGITAAA ATGGITACCA TTTGCTTCTC CTAAAANITA TATAAAT SEO ID NO:927: (Length of Sequence = 286 Nucleotides)

GECTGTCATG AGAATCACTT GAACCCGGGA GGCGGAGGTT GCAGTGAGCT GAGATCATGG CACTGCACCC TAGCCTAGGT GACACAGCAC AAAAAAAANC AATGITCCAC AAGTCAAAAA TIGINTICAG GGAGTAGAAA AGTAGTAGGC TAGGTATCAA AGGGTATGAA TGACTAAGTT CCTTCTATAA TATATTGACT ATAGGTTAGG AGATACACTT TCAGTTCCTG TTTTTNGTAG ATCTCCCAAT GATCTGTCAT TTAAGAGTAC ACACGATGAG TGGAAA

SEQ ID NO:928: (Length of Sequence = 349 Nucleotides)

CITGITIAAC CAGIATTAT TGCACATGGT TITGITATCI ATTGCATGIG GIAAATTACC CCATACTTIG CITCITAAAG CATTAGACAT TITCIGIAGGT TAAGAATTCA GAAGCAGCTI AGCTGAGCAG TICTIGCTCA AGGICTGICA TGAGGTTGCA GICAAGGAC TGCACGAGCG TGCAGTCATC TGAAGGCCTG ATTGGGGCTG GAAGACTCCC TTTCCAGATG GCTCCCTCAC AGGICTGGCA TGTCAAAGCT GGATTGTTGG CAGGGGACCT CCATTCTTCC CCACATGGGC ATCTCCATAG GCTGTTTGAC ATGGCAGATN GCTTCCTCCA GCAACTGGG

SEQ ID NO:929: (Length of Sequence = 395 Nucleotides)

AGAGGAGGCA GCAGCCACCC CCAAGAAGAC TGTACCTAAA AAGCAAGTTG TGGCCAAGGC CCCAGTGAAA GCAGCTACCA
CCCCTACCCG GAAGAGTTCT AGCAGTGAGG ATTCCTCCAG TGACGAGGAA GAAGAGCAAA AAAAACCCAT GAAAAATAAA
CCCAGGTCCCT ACAGTTCAGT CCCCCCGCCT TCTGCTCCCC CACCAAAGAA GTCTCTGGGA ACCCAGCCTC CCAAGAAGGC
TGTGGAGAAG CAGCACCTN TGGAAAGCAG TTAAGACAGC AGTGATGAGT CTGATTCAAG TTCTGAAGAA GAGGAAGGAA
ACCCCCCAACT AAGGGCAGTA GTCTCTAAAG CAACCACTAA ACCACCTTCA GCAAAGAAG CAGCAGAGG CTCTT

SEQ ID NO:930: (Length of Sequence = 214 Nucleotides)

ATCCAACAAT GACAACTOCT CITOGGACAA TATTGGCACT CCATTCAAAC CITGITICAG GICAGICCGC ACTTCATCAT CTCCCCAATTT GICCAAAACA TACTGTAGCT CAAGTACAGT TITTAAACGT TICTGTINCAG CITCITCTCT CATAAGCTGC TCCCCGACGTG CTGTCTTCTT NATTGTTTTC TGAATATCTT GACTTAGTGC CATG

SEO ID NO:931: (Length of Sequence = 245 Nucleotides)

GAAAGINITC ACAAACATGA TGCTTATCIA ATAAAATATC ACTGAGCAAT AAGGAGAAAT ATIITAAATA GATTTGAAGI TGTGAACAAA TAATTTAGAG TCCAAAGAGG ANAAAGANAA TTAACTCTGT TITTINATCCC TAGAACTCAG AAACTTTACT GGATTGGTCA ACAAAGACAA ACTTTITATT GTATAAAACA GTAGANITCA TGGAAGGGAT AATNCTTTTG GAACAGGCTT CTCCG

SEO ID NO:932: (Length of Sequence = 303 Nucleotides)

CATATTGGGG GCCCAATATA AAGCAAAGCT GGAAGAAGGG ATGATCCATG TATTINIGGG GATGGGATAT GGACAGGGAA
ATAGIGITCC AACTCCATGC TGAGIGITGT TTTGAATTGT AATGIGAAGT TGCCACCATA CCAGGGCTAT GACTGINIAC
GATGTCTCAC CCTTGTAGGC TAGTAGCTTT GCAGTGGGAA AAGATGACAG GGCCACTTGT CCAGGGCATT CAGGTAATAA
AGTCCCTGAG CTCCAAGTTG CTAGATCTAA GGAAGTATTT TTCCCTTCAT GTCAAAGATG GGG

SEO ID NO:933: (Length of Sequence = 186 Nucleotides)

CICTITIGGG CIG-ITCANA TCTCCGGCGA ATTGAAAGCA GIGATCICIC AGGIGCTAAC CGGNATAGIA TTAGAAGACT CCAATATCIT GCACCIGIG GGACITACIG TATTTATCIT TGITTTGITT CATITGCTT TGGGITCITG GICATGAGGT TTTGCCTAAG CCA-IGICIT CAAGGG

SEQ ID NO:934: (Length of Sequence = 336 Nucleotides)

GOGAAAACGT ATCAGCACAT GAAATACCTT GTAACTATTT CATTTATATA ATTTGCTACG TGTTCTTTGC AACATAGTGA
AAAATAATCA TGTCTGATGT TTAGTAGGCA CATAATAAAT AGTAATGGAA TGAATGGTTG TATATTTAGA GAGCCATGCT
GAAAGGTTAA ATAGCAAAAT ATGACTACTT GGAGAATAAT GTTAAATTGT CAAGGAGAGT AGTGTTATAT GAATACTCAG
ATGCATGGAT ATATAGANAA TGAGAAAAGC GACAGAAGGA ACTTAAAGAG NITTTAAAAA TAGCTTTGTC TAAAGATTAA
AAATTAAAGG TTCTAA

SEO ID NO:935: (Length of Sequence = 383 Nucleotides)

AGGTAAGAA ACTGCTGAGT GGGCTCCTTG TACCAGCACC AACCAGCAGC CCTTGACAGC ATAGATGGGA TGAGTGTAAG
GGCTATCCTT AGCATAAGGG AAAGACGGTT ATAAGCTGAG AAGATTGAAA GAAGAATGGA GCCACAAAGA GAATAGCATA
AATAACAAGA AGGAAACATG AAGAACAAGC ACTTAAGNTA TTAACTTTCA GTCTTTCTCC ATTTCTTGAT GTCTAATGAG
GCAAAATAAC TGGGCAAGGA CCACCAAGAT GAAGAAGTTA AATAAAATGT CACAATGAAA TTNAGGTGCA ATAATACAAC
TGTTGACTGA CTTTCCAAAA CCACGGTGAT CGGTAGAGTA TCATCAATGT TACCGAGGAT TTT

SEQ ID NO:936: (Length of Sequence = 204 Nucleotides)

GAAGCTGTGC CACCCTTCTN AACTTINATG AGCTGCCTNA GCCGCCAGCC ACCTTCTGTN ACCCAGAGGA AGTGGAAGGG
GAGCCCCTGG ATGCCCCCCA NACCCCAACT CTGCCCTCAG CCCTTGAGGA GCTGGAGCAA GAGCAGGAGC CGGAGCCCCA
CCTGCTAACC AATNGCGAGA CCACCCAGAA GGAGGGGACC CAGG

SEO ID NO:937: (Length of Sequence = 386 Nucleotides)

CTAACTAAAT AAGGGTTGCC AGATAAAGTA CAGAAGGCCC AGITAAACTT GAAATGCATA TGANCAAGAA ATATATTINA GTATGANTAT GTCTCATGCA ATATTTGGGA CATAATTATG CTAAAGAAAG TATTCACAGT TTTNCCAACA TTCAAATTAGG AATGAGTGTC CTGTATTTIN ATTTGCTAAA ATGGGCAACC CTAAGCTGGT ATCTCTACAG TTACATACAC TTACCAACCC CACCCATTCA TACTGGTCCA AGTTACACCC CAAAAGAGGG CAGAAACAGA ATCTGAACAA GCTCAAGTTT NGAGGGCAAA AATGTTTCAT TCTGCCTTCT GGATTNCTGT ATGAAGACTT TTGTTGTGAA AGATATGAAT AGAACC

SEO ID NO:938: (Length of Sequence = 349 Nucleotides)

GACACTITCA GAATTAAGAA GCCTTGCCCT CITTGCGTGT CTTCACAATT GINITAAGTC TATTATAGTA TICATTITAG
TTTGAAAGCA ATAAATACAA TATTAGTACA AGCACACTGT CAAGAAATCC CTAGAATATG GCTCCTCTGA AGGTTGACAT
GCGTCTGCCT CGCATGTATC TTTTCATCTC CAGCATCCAG ATCAGAGTCA ACAACAACAA CTCTACAAAAT ATCAGGCTTC
TTGGTGGAAA GAAATCTGGA CATTITTNCT ATGAAAAAAA AGTTAGGTTA CATGGCATTA ATATTTTTGC TAGACTTAAC
CTACAGAAAA TGTTTCAAGC TTATAAAAA

SEQ ID NO:939: (Length of Sequence = 374 Nucleotides)

GAAATAAAGC CICACAAGAA ATAAGGIGCI TATGGIGITA AGITACAATG GAAAATAATC AATGGCATTI GTATGCATGC
TGCATGIGIG ATGIAGATCA GTTCATAGGA GATGGGGCAA CAAATAAATA TCACCATGGG GATGIGATCA TCAAAACCCA
GGCTGTGGAA AACTGTCAGI CAAGITTCTT CAACATATTG CAAGAAAAAT ATGATGGCTT GAAAATCTAT AGATGAAGCA
ATTITAACAAA CCTACCAATC TCATTTAATC TTGATTACTT TTAAAAAAAGA ATTAAAAAGA TGACAGAGAA AGGGITTAAA
AATTTGTAAG ACACGGCTGG ACGCGTGGGC TCACACCTGT AAATCCAGCA CTTT

SEO ID NO:940: (Length of Sequence = 385 Nucleotides)

GIRATCCCAG CTACTIGGGA GGCIGAGGCA TGAGAATITC TTGAACCCGG GAGGCGGAGG TTGCAGTGAG CAGAGATCAC
GCCACTGCAC TCCAGCCIGG GCAACAGAGC GAGACCCTGI NICAAAAACA ACAAAATAAA TTTCCITITA ACATCIGINC
CAAAAATGAG ATAAGCGIIA TCAGGGCAAG TCCATCCTCA TCACTCTTIC CCTCCCCACT GCCCTCTCCA CGATGCCCAG
CTGATCAAAA GTCATTTTTA CTCATAAGAC CAAAGTATCA TGGGATACTG TGCAGTINGA GAGCAGGTTG ANCATCAGAA
ATAATTGCTG ACAATAAAGT AAAAGATGGG AGAAAAGCAA GGCCNATTGT ATATAATACA GCTTC

SEO ID NO:941: (Length of Sequence = 406 Nucleotides)

GGTAACAGGT TITTACCAAC AATTGCTTGT AGCTAATGTA GAACATACTT GAGAAAATGG CTTCTGTGAA AGACCAGTTA

GTACCAAAAAT AATCTGGCCC AGAAAAATAG CCACCATTCT TGACTACATT AATAGAAATA GAATAACCCC CAAAGGGAGA

TGAGAAGCAT TCTAAAGTGC ACTGATCATG AGTTTCTATG TGATGATTTG TGTCCATTTG GAGCTCCAGT GCTTTAAAGC

TGAAAATGAAT CCTGGCCTTT CACCACCCTC CCTGCCCATA GTATGGTATA TCCTCTTATT CCTTCCCTCT TAGCTTACTG

AGAGTGTAAT TTCCAACCAG TTAAGGCCAA AGAGGACTAT TTTCTAGGAA AGGAGAGAG GATGAATTAG CAGTTAATGG

AGGAGT

SEO ID NO:942: (Length of Sequence = 296 Nucleotides)

GATGGCTCAT GCTAGTTCAG CAAATATTGG GCCCTTCCTG GAGAAGAGAG GCTGTATCTC CATGCCAGAG CAGAAGTCAG

CATCCGGTAT TGTAGCTGTC CCTTTCAGCG AATGGCTCCT TGGAAGCAAA CCTGCCANTG GTTATCAAGC TCCTTACATA

CCCAGCACCG ACCCCCAGGA CTGGCTTACC CAAAAGCAGA CCTTGGNGAA CAGTCAGACT TCTTCCAGAG CCTGCAATTT

CTTCAATAAT GTCGGGGGAA ACCTAAAGGG CTTAGAAAAC TTGGCTCCTC AAGAGT

SEQ ID NO:943: (Length of Sequence = 223 Nucleotides)

GIGCCATIAC AACITINCIG TAACCCIGAA ATTGIGTCAA AGIGAAAATT TITTAAATGA GATTATAAGA GCATAATCAA

ATTGGAATTT CCTTAGGATA CCAGAGAATC ATTINCITCI CAGGTAAAGG ANITITCCIT TINGTAGTCC AGAGCTATAC

ATGATTAAGA AANIGITCAG NCCAGGAAGA TGACATCICI GCTAACCTAA TCGATTATCA TGG

SEO ID NO:945: (Length of Sequence = 222 Nucleotides)

CTTAAACAAT AAATACACCT GAGTTAGTTT TCCAAACCTT TCCTCCTGAT TAAATGCCCT TAAAACTTAA ATCTCTTGTT

ATCTTCAGTT GTGATCTAGT CCCAAGTGGA AATTACGTTT AGCTTTAAAA CCATGAATTT AAAGCTCAAG CCTGTAGCTG

GCTGCCTAGG CANTITATGA TTAGTTTCAC AGAATAGCAC CCACTGGCTA CACAGGNCCC AG

SEQ ID NO:946: (Length of Sequence = 286 Nucleotides)

GCTCTCTCTA CCCCCTCATC TAGGIATGIN TATAGCTCAT TTATTTAGGG GTGATGITAA AAAATTGAAT GCCCTTAATG

GCAAGGGAAC CAACCAATCA ATGTGGATGC CACAACTITT TCCCCTGTTG ACTGTTGINA TTGGTATGGA AGTATTTTTT

TTTTCTCCCCA GCTTTTATTT CAGGTTCAAG GGATACATAT GCAGGTTTGT NACATGGGTA AATTGCATAT TGTAGGGGTT

TAGTATACAG GTTATTTCAT CACCCAGGNA ATAAGCGTAG TACCTC

SEQ ID NO:947: (Length of Sequence = 335 Nucleotides)

GGAGGIGCAT TINCICCCCC TITGAAAGAT TIATGIAGAT TCCTAAAAGA AAATTCAGAA TATGGAGTAG CICCIGANTG
GGGAGATGIT GITAAGCAAT CIGGATITCT TCCAGAAAGC ATGIATGANC GIATTCTCAC TGGTCCCGIT GIGAGAGAGG
AAGTAAGCAG GCGGGGAGA CGGCCTAAAA GIGGAATTGC AAAGGNCACA GCAGCAGCAG CTCTGCAATC TGCCACCAGT
GTTTCAGGCA ATCCTTTTGT TTAAGCCAAT GGACCTACTT CCAGGGNGIG GGNTCTCACA AACTINTTIC AGGGCCTTAC
AACAAAAACC TACAA

SEQ ID NO:948: (Length of Sequence = 216 Nucleotides)

GGATGTAAGC TCCCAGACAG ACATCTCGGG AAGCTTCGGC ATCAACAGCA ACANTCAGTT GGCAGAGAAG GTCAGATTGC
NCCTTCNATA TGAAGAGGGCT AAGAGAAGGT TCGCCAACCT GAAGATCCAG CTGGCCAAGC TTGACAGTNA GGCCTGGCCT
GGGGTGCTGG ACTCANAGAG GGACCGGNTG ATCCTTATCA ACGAGAAGGA GGAGCT

SEQ ID NO: 949: (Length of Sequence = 369 Nucleotides)

CCCTTCCTCA AAAGATAAAA ATCTCTGGCA GAAGAAATAG TTACCTGCTG CCATCCATCA GTACTGCAAT TACCATGACT
CTAAGTGACC TTCTTGCCCA ATGTTTAATG CACAATGGAC CGTGCCCAGG GAGACCTGGG CATTNTCTGT TGCTTTGTTC
TACAATGATC CCTTCTGTTC TAGCAGCGTG ANTCACTGAT GGTCATACTC TCTGAGGACT GTACGCATTT TCACCCTATA
TCCACCTGTA CCAGAAAACA TGGACATAAT TTAAAGTTTA TTTCTACTTA ATAGAGTGAT ATTCCAACCT GTGTGGGAAA
ATAACCATIN GTCACTCTTT AAAGGAATGG TATTTAACAT TTATTTATA

SEQ ID NO:950: (Length of Sequence = 288 Nucleotides)

AATGGIGAAA TAGAAGICCA ATTACCIGGG GAAACTICAT CITAACCCIC TGGAATTINC AGICTAACCI AAATATIGAT ACTACACCIG CAGCAGCATI TAGITTAGCA TGIAGGGAAA AAGTAAGICT AAAAAATATI TNCATAATCI TIGGITCCIA AAATTATITIT AAAAGAGATG CAGGACATA TGICTGGAGI TIGCITATGG CCAATAGGIT AATGCITCIA GCITCIATGC TTATTGCAAA TTITAATTAT GIGAATATGC AATTITCACT TATATTTG

SEO ID NO:951: (Length of Sequence = 302 Nucleotides)

TGTCACGATG TTACAAGAAC GATTCCGGGA GITTNCCCGA NACACCGGGA ACATTGGGCA GGAGCGCGTG GACACGGTCA
ATCACCTGGC AGATGAGCTC ATCAACTCTG GACATTCAGA TGCCGCCACC ATCGCTGAAT GGAAGGATGG CCTCAATGAA
GCCTGGGCCG ACCTCCTGGN GCTCATTGAC ACAAGAACAC AGATTCTTGC CGCTTCCTAT GAACTGCACA AGTTTTACCA
CGATGCCAAG GAGATCTTTG GGCGTATACA GGNCAAACAC AAGAAACINC CTTGAGGAGC TT

SEO ID NO:952: (Length of Sequence = 302 Nucleotides)

TTTTTTTTINI CCACITCACA GITGATGCCA ACCCAGCCIG CATCACAGAG ACACITATAT CCACIGAGAC CTCCAGTACA
GITTCCATGG ATGCAGGGAT TGCNCAGGCA TTCGITCACC TGINAGTAGC AGCTGGGGTG ATGGGGTCCC TCGGGGCATA
TACAGCGGAA ACCATTCACA CCGITGATAC ATGINGCACC CTTGCGACAG GGATTGGNGG CACACTCATC AATGTCAATG
TTACATCTCT GGCCTGTGAA ATCCTGGTGA GCAGACACAA CTGTAGCGAT TAATTGCCAT CC

SEO ID NO:953: (Length of Sequence = 301 Nucleotides)

GAAAATNAAC TITGITIGAA AAGITAGIAT GGGITAGAAA TGGGAAGAAA ATCTAAAATG TAAGAGTAAA AGCAAGGCCT
TCATGGCATT CTCTITIAAT ATGGGCTTIN CTGTGITAGI TAACATCTGA TAATATGACC CCCCAATCTA TTAATATITA
TTATACTCAT AAAATTACAG AAAAAACCTA AGAAAGGGTA TGTATTGAAG TGGAATGAAT AAATGCAAAA AATGTAGTAC

## TTATAACATT TTGAAGAAAA TCTTTAAAAA TNITTGITTA CACAGAAAAT AATCTTAGAA A

SEQ ID NO:954: (Length of Sequence = 217 Nucleotides)

AGAGCTIAAA AATAGIGAAG TCTTTATAAG TAATTITTAA AAATTIAAAC TAGGACCATA AATTICTAAA CIATGAGATA AATGANCAAG AAAACAAACA GGIGITTAGG AAAAGGTATG TATATGGTCA ATGAAATAAA TACAACTGTA TTTTTAATGA GANTTAACAT ATTTTNNTTT AACAAAAGCA GCATGTAACA CACAATGTAT TATATGT

SEO ID NO:955: (Length of Sequence = 260 Nucleotides)

TATTIGATAG AATTITCIAG TGAAACCATC CIGACITGGG GITTTATTIT GGAGGAATIT TAAGITATTA ATTCCGICTC
CITAATAGIG ATAGGACIAT TCAGATIACC TIATTICATA TTTGGIGAGI TITGGIAGCI TGIGITTCIC AAGGAAGIGA
TCCATTICAT CTAAGITGCC AAATTIATGI GIGIATAATA ATTIGIAGIA TICCNGIATI ATCCNITIGA TGICTGIAGG
GTCICTAGIG ATATCCIATG

SEQ ID NO: 956: (Length of Sequence = 216 Nucleotides)

CCCIATTAAA TCATTAAGCA TIGCATGCAA TACTITINCI GIGAAAATTA TTAACITCCI GGIATATAAA ATTATITCIA GITATGITTA AATATITCCN CIGGGATATT ATCATCITAG ATCIGIAAAG TGGIACIAAA ATAGITAAAA ATTATITNIA AGATATACAC AAACAGAAAA ATATAAAANC AAATGIATCI TATACATAGT ACTTGG

SEQ ID NO:957: (Length of Sequence = 353 Nucleotides)

TATGIACCAG GIGIGGAGCC TAGAACAGAC ACCAGICAGA AGIGCAGATA AGGICIGACT TICCAGCATA GOCAGGGGAC
TIGGCIGACT CCACATGICC CCAGGCCITA CCTAGCIGTA AAGCAGGCAG GITGIGAAGT CATAGIGGCA GITTATGAAA
TATTIAGGGG ACCITAATAAT CITTAAATIG TATAACATIT CITGCATAAA TITCCITICA TGAATCCITT CATGACITAG
ACCATCIATG ACATGCTIGG ACTITCIGAC TIGICCITAAC CACCCCTCIC TITAAACAAC CAGICTITIT ACTITAGGAC
AAGAATTIAC CATACAAGAT TCTITTGIAT AAA

SEQ ID NO:958: (Length of Sequence = 410 Nucleotides)

AAGGAATGA ATTIGATAGC AGATTGTTAG AGATTAATTA CCTATCATAT GCCAAAGCCA CTTCCTACAT GTCAGTGCTA
AGGAATCCCC TAGAGATGGA ATTCCTAGGT TCAACTGAAA ATTAATTGTA ATTAATATAA TAGGTTAATT CATTGTAATT
ATTTTTAAGC CTTTTGGCAA TGAGTTAATT CCACAAGATC CACATTGCTT GAAGTGTCAC AGAGAACACT TGATGAGAAT
GINCTAGTAA TAAACCTTAA CCCTCTGGG AAAAAATCCT ACTGTCTTC CTTCTGGCTT CGTTTCTTCT GGAACATATT
TNGGTGGCAT TTGGATATCT GGAGGACAAA GGGATCCCTA CAAGGTGGNT GCATAAACAT GCGTGGGCCC AGATGGACTG
TGCTCATTGG

SEQ ID NO:959: (Length of Sequence = 197 Nucleotides)

GCCCGGCGAC CGTAGCATCT TCTGGACCAC AAAATAGAAC ATTGCCAGGC AAGGCAGGGC ATTTGGGGAA TTTNAGAGAA AGCAGGATGA GTGATGGAAT TGGGAGGGTG GCACAAGATG TTAAACAGCA TATCTTAGTC CTCATCTAGG GTATAAAACA GGACCCATGG ACTCTAGCAT CCTGGAATGA CAGAGGG

SEQ ID NO:960: (Length of Sequence = 345 Nucleotides)

AATAAACTIC TGITGITTTA AGCCACCTAG TIGIGGICAC TIGITATGGC AGCCITTGGA AACCAACAC CCCGCACATG GCGIGTITAA CGCAGGCTGA TACAACCTTA AGAAAGGAAT GGNIGIGGIC ATCAGCAATC TCCAATACCT ACAGCAAATG GEAAGACAGG GAAGGACCAG AGGIGTAGGI AAAGCAAAAA GCCACAGGIC ATTAGGAAGI GATGCICCAA CIGGGCATGG AAAAGGAGIT TGGAGTIAGG AACACGACAG ATCIGICIGG ACAAGGNICC AGATCICICC TAGGGGGAAG NAGGGGCAAC TTAGGACAGI TITTGIGICI GIGGG

### SEO ID NO:961: (Length of Sequence = 327 Nucleotides)

GCTGAAGAG AACATGTGTC CTCGGCCACT TCAATCACTG AGTGTGACAA ACTITCTTCC TTTGCCACAT CAGTGGGTGA
GGACCAATCT NTGGCCTCAC TTACAGCTCC CCAGACAGAG GAGACAGGCA AGAGCTCCCT GCTGCTTGAC ACAGTCACAA
GCATCCCTTC CTCCCGTACT GAAGCTACGC AGGGCTTGGA CTATGTGCCA TCAGCTGGTA CCATCTCACC CACCTCCTCA
CTCGGAAGAAG ACAAGGGCTT CAAATCACCA CCCTGTGAGG ACTTCTCTGT GACTTGGGAG TCAGAGAAGA GAGGAGAGAT
CATAGGG

## SEO ID NO:962: (Length of Sequence = 369 Nucleotides)

AATTTAGATT TGCAAGTTT CTACATTTC AAAAACAAA AACAAAAAA CAAAAACAA ACAACAAGAA ACGTAGACTA
GTTGGGCTCT GTCATGCCCA GGACATGAAT CAGCCCCTCA TCCAGCTTCT CTGACCATTA GTCACTTAGT GGTCTTCTTG
GTTTTCAGAT AGCAAGAAGG GTGATTACAG CACGATATTT TGACAGAGAC CACATTCACA TAGCTTTTAT TAGTTATTGG
TTGCTGTTAA TCTCTCACTG TNCTTTGTTA AGCTTTATCA TGGTATCTAC GTAGAGGGAA AAAGCCACGG TATAGATATG
TAGGGTTCCA TACTATCCAG TCTCAGGGCA TCCACTGAGG GGTCTTC.3

#### SEO ID NO:963: (Length of Sequence = 278 Nucleotides)

CTCAAACACC CGAGGCCGGG AGGAAAGAGA AGCCGATGCT TCAGAGCAGA CACTCCTTAG ATGGCTCCAA ACTTACAGAG
AAAGTGGAAA CTGCTCAGCC GCTGTGGATA ACGTTAGCAC TGCAAAAGCA AAAGGGGTTT CGGGAGCAGC AGGCGACGCG
GGAGGAGAGA AAGCAAGCCA GAGAGCCAA ACAGGCAGAA AAGCTCTCCA AAGAAAATTN GAGATCTCCG ACTCGGCTCC
CCCAGCGCCG CTGGTAAAAG AAGTCACCAA GAGGTTTT

## SEQ ID NO:964: (Length of Sequence = 349 Nucleotides)

ACACTCICA: TATAGACAGI CGIGAAGAAC AAGGCIGAGG GATITINAAG TAAACCCATI TICAGGATGA CIACAATCCI
TCCACTICIA GAAAACITAG AAGIACAAGA AATAGCICTA CIACGGGIAA CIGATITAAC AATITCCCAA ACACCCITIC
CACTACCCAA GCCCGIGGCC CTCAGAGAGA ACCGGGATGG ATIGCCATCI GGGITCAGAG GCAATATGAG GAGGITGGGG
GGATGGCAGG GGCATCCTCA GGGITGGGG GCAGGCCAAG GGGATGAGAT GGCAAAGGAC AGCTITNGGA ATCAGATAGA
CGATCCAGGG TGCCTTCCTA CACTTGCAT

### SEO ID NO:965: (Length of Sequence = 361 Nucleotides)

AGCAGCAAGC CAGACGTGAC TGTCAGGAAC AAGCTAAAAT AGCTGTGGAA GCTCAGAATA AGTATGAGAG AGANTTGATG
CTGCATGCTG CTGATGTTGA AGCTCTACAA GCTGCGAAGG AGCAGGTTTC AAAAATGGCA TCAGTCCGTC AGCATTTGGA
AGGAACAACA CAGAAAGCAG AATCACAGTT GTTGGAGTGT AAAGCATCTT GGGAGGAAAG AGAGAGAATG TTAAAGGATG
AAGTTTCCAA ATGTGTATGT CGCTGTGAAG ATCTGGAGAA ACAAAACAGA TTACTTCATG ATCAGATCGA AAAATTAAGT
GACAAGGTCG TTGCCTCTGT GAAGGAAGGT GTACAAGGTC C

SEO ID NO:966: (Length of Sequence = 163 Nucleotides)

CTGCCTTCTG GGTTCAAGCG ATTCINATGC TTCAGCCTCC CAAGTAGCTG GGATTACAGG CATGTGCCAC CATGCCCAGT
TAATTTTTGT ATTTNAGTG GAGATGGGGT TTCGCCCTGT TGACCAGATT GGTCTTGAAC TCCTGGCCTC AAGTGATCCA
CCT

SEO ID NO:967: (Length of Sequence = 365 Nucleotides)

GIGICAGIAA TATGITGIAC ATATTATINC ATCACCCAGG TGITAAGCCC AGINCCCAAT AGITACCITT NCIGCICCIC
TCCCTCCTCT CACCCCCCIG CITCAAGICT ACCCCNGIGI TTTCTTCTTT GIGITCCTAA GINCTIATCA TTTAGCTCCC
ACTTGIAAGI GAGAACATGC AGIATTTGGT TTTCTIGTTCC TTTGITAGIT TACTAAGGAT AATAGCCTCC AGCTCCATCC
ATGITCCCAC AAAAGICATG ATCTCATTCT TTTTTTATGGC TGCATAGIAT TCTGTGGTGT ATATGIACCA CATTTTCTTT
ATCCAATCTG TCATTGATGG GGCATTTAGG GTTGATTCCC TGTCT

SEO ID NO:968: (Length of Sequence = 390 Nucleotides)

GIGTATAGIA ATTIAATAGI AATIAAATGI AGAGIATTIG TAAAAACAAG GAGAGGAAAA AGAACAATIC ATATITGAGA
ACTCCIAATA ATCITCIAGA GCAGAGITCA AAGAAGCAGI GGIAAAAATA AAGCCAAAGA GATATAGGGG CIAGICTIAG
AACCAGGACT TCCIATAGAA CCAGCTICCT ATAGAATCIG AACITTATCT GAAACTCTIT CACAGATCIC CTCCACCITA
ACTICCACAA AATAAGAAAT TIGGATTTIG AAGGCAAATT TGIATATTIT AAGGAGCAGG ACAATCICAG CIGIATCIGG
GITTGCAGAT ATCCAACAAA TCCTACCCAA ATCACTITIC CAGCIGCAGA CTIGGAATTI CAGATCCAGG

SEQ ID NO:969: (Length of Sequence = 340 Nucleotides)

CAGACAGAAA AAGATTIGAA GAGACGGGTC AGGAACTAGC GGAATTACIG GAGGAAGAAA AACTAAGITG TGIGCCAGIN
CICATCITIG CIAATAAGCA GGATTIGCTC ACAGCAGCCC CIGCCICTGA AATTGCAGAA GGACTGAACC TGCATACCAT
CCGCGACCGA GTCTGGCAGA TCCAGTCTTG CTCAGCTCTC ACAGGAGAGG GCGITCAGGA TGGCATGAAC TGGGICTGCA
AAAATGTCAA TGCAAAGANG AAATAAAATC TAGACGAATG GAGATGCAGG AGCTTCGGGA GCCGAATTCG GGCCTTAAAA
ACACTAATTT GCTGCTTTCT

SEO ID NO:970: (Length of Sequence = 372 Nucleotides)

TTTTAAGATG GGATCTCACG GITACCCAGG CTGGAGTGCA GIAGTGCGTC ATAGCTCACT GTGGCCTCAA ACTCCTGAAC
TCAAACTATC CTCCTGCCTC AGCCTCCCAA ATAGCTGGGA CTGCAGGCAC ATGCCACCAT GCCTGGCTAA TTTTTTAATT
ATTTTGTAGA GATGGGGTC CACTTTGTTG CACAGGCTGT TTGCTTGATT CTTAAGAACG TATAGGGATC CAGCTGTACA
GAGCTTTCTG CAGTCTTTTG TAATAGAATT AGTTGTTAAA ATTGTACTTA TTACATGAGG CATCAAAGAC CTTGGAATAA
AGCTATTNCC TCACATATCT GGGCCATTAT TTTGGACTTA CTATGGTTAC CG

SEQ ID NO:971: (Length of Sequence = 337 Nucleotides)

GACTATAGAG AACGCTGAAG TITTGAATAA AAGACTCTAG GGTGAGCTTC ATCAGTGCTT GCTTTGGNTC CAAGATGTAA
TGAGATTCTN CTTTCACGTC AACAATTGCC GCAAATNCTT TCACCTGAGT GGAGCTCGGA GCACCCAGTC TCTCTGCATA
TAACCAAAAC AAATTTGAAT CCAAAAAGGTA GATGTTGAGA GTCTTGTTGG TTCTGCAGCT CAGGCCTGTG AAGTTTGTGC
TAGTCATGTC CACTTCTGGA AAGAGGATAC CTGTNCTCCT CAATGTGAGG GAACGGGAGC TTNGGGGCAT CAACCTCACA
TTTTCTTCTC AAGGGGA

SEQ ID NO:972: (Length of Sequence = 396 Nucleotides)

TTCCTTTACA TCAAATATCC TCAATGGAAG AGGGGATATT GCACACAAAT ATCATAAAAG CACTACATAT TACTTTCACT
GGAAACTAAT TTNCTACATT AGATATGACT GGATAGGATA GAAGTGATCC AGGATTATAA GACATAATAC CATACACAGC

TECAGACTEA CACAAACACC ATTCAGAACA AGAGAGAGGA GTGTGAAGTG CTTCTCAGCT GEGCTCAAGA CCACTTCTTT
CCAGTGCTGG AAAGAGGGGC TGCATGCAGT GTAGGAAAAG CGTGTCTCTG AACTGCCACA GEGTGTTCTC GAAAGGGCAG
CCCGGTCTTG ATGCCACTTC TCCATGGCTC CTGTTTTTGG GGGAGCTCCA AACAAGTGCA GAGAAGCTGC CTATTT

SEL ID NO: 973: (Length of Sequence = 401 Nucleotides)

TTCTCAAACT TCCAGTTCTC TTCCTGGGCC AAGATCTGGT CCACCACTGC CGTGGCCTCC TTCCCCTGGC GGATGT TCCCCTGGA GCAGAGAAAC TTTTCTTCCC AGCAACTTCT TCATCTGATG GGAGGAGGGA ACTGAATAGC TTTCC AGGAGAGATAAG AAAGAAGAGT GTGGTGTGAA CAGGGAGGCTT TGAGCTGTGG AGTTGGGCTG GGCATGGAAA ATNCGGAAGA ATNCGGAAGAAC GAGTTAGGAGA GTTTGGGGG CTTCAGAGAA CTCTNGGATC AGCCCTCCCA CACTCACTGC CCTTTAAGGT ATCTTTGGGG AAAAC AGGG GCTTCTATGA TGAGTCTGGC AGCTNCCCAC ACTGCATTCT CCTCCTGCAT TTTTTTACCA TGCACCAGGG C

SEO ID NO:974: (Length of Sequence = 3 Lucleotides)

TTTACAAATG AACCACTGAG CACCTCAGTA CTTAGCTCAT ACCTCATACC TTAGTTCCTT AGTACTTAGC CTTGTGCCAT
CTTGAATGAG ATGGAGGGAA GTGAAGCTCG AAGGAGTGAC AGAGACATAG TCCTTGCTCT CAAGGGGTCT TTAGCCTGGT
CTGGGGGACA AGATTTCCTC ATCTACCTCT TGAAAGGTGG CAGGACAACT CCACACTGGA GTGTTCTCAC CAGCAGATAG
GTGCTGCGGG AGTGTGGCGC CACATTCTTT ATAGCCACAG GCTTTCGTGG GACTINCCCT GGGGTCCTTC CCTATTTGGC
TGGGTGGACC ATAAGCGGCA AGTGAATGTG GCAAACTTCA ATTCACAATT AA

SEO ID NO:975: (Length of Sequence = 340 Nucleotides)

GACAACAGAA AAAGAAGTOG ACAGCTACCC TAGATTCTAG CTCACACATA ATTCAGCCAG ATAATCATCA TITAAATAAT ACCCCTTGAA ATTTTTCAGA CTCTTACAG CTCTAAAAAC ACAACATCAG ACATAACATC ACACATTTGT TCCAAAGGAC TAAAAAATCAA AAGCAATTGC AAAGTATTGG GAATCACTTT TATGGCTTTC CTAAGGGACA GTCCCCATCT TTCCAAGGAG TGTTTTTTAAA GAAGCACTAA CTCTGGTAGG TTATCAAACT ATTTTTTAAT TCTAAATAAA TAAAAGACTA ACTGAAGGTC TCAGGTGCAC ...CTTATTTTT

SEQ ID NO:975: (Length of Sequence = 343 Nucleotides)

CIGITOCCIA AATATTATTA AAATTITAAA AATTAGACAT TIGGICTAAA TIAGACAGGI AAGATACTAC TGICCITACT AGATGCITTA AAGICATAAA CIGCITCIAT GGCITTINAT AATTGINCAA CITGCITGCI TIAGAGCCAT TGGATTCIAG GIAAGGCCTA GAGACATTIG GAGTIAGCCA TGICCCCIAG CTATGCTAGA AAGAGTCCGA CATTATCIGT GGITCIGICC TGIATCCTAC ACTCIACACC TGATACATAA TIAAAATTAC TIACACTAAA AATAAAAATG GATGCATTIT TIAGGTAGGA AGGGTATGGG AAATTATAGG TIT

SEO ID NO:977: (Length of Sequence = 265 Mucleotides)

ATCITIGIAA TATCAGIGCC TAGACTAAGC CTGGCGTATA ATAGGCACTC AGAGATITGA AGAATAAATG ACTAAATGAC
TGTATCAAAT ACTTGCCCAT TGTTTGCTGT TTCTGANTTG TACAAGGCCA TCATGATAAT TGATGATCTT AATAATGTGA
GAATATGATT CTNTTACCTT AGTAAGAGAG CCATCAGTTT ATTGGATGAT AGTTATATGG AAAAAGAAGA AATGCTACTG
TGATAAATAT TTATAATTTT AAACA

SEQ ID NO:978: (Length of Sequence = 285 Nucleotides)

ATGGTGGGCT GCCCTGGCCG AGGTGGCCAA GATGGCACCT GTTTCCTGCC TCANAAGAAA AGGCACTGAC GCACTGACCC
TTTNAGGTTG TNTGGGGTGT GGTCAGTGCC CTCCTGCCTG AGGGTCAAGT GTGTTTTCAA GTCAACTTCA GCAGACCTCA

SEQ ID NO:979: (Length of Sequence = 316 Nucleotides)

GIGGGINCAC ACTOTOCTOC TECTOCOCCAA ACTOCTCATO ATTGAAGOOG AAGTGGTCAA TGAAGGCAGA GGICATGOGO
TGCATCTGGA AGTOCATGAA GGCCTGCTGC AGCACAGCCT CCTCAGGGAA GTIGAACTOC TTGAGCOGGT CGTCCTCATO
GICACTGGAG GAGTGTAGGT GGTGGGTGTT CACCAGGTCC ACCATGTTCT TCTTGTTGGT CTCCGCCAGG GGCCCCGATA
CGAAGGCTTC CCACTGCTCC TGCTGCTGCC TGGGCAGCTC CTTCAGCAGC TTGCCGCAGC TGCTCTGCAA TTGGGG

SEO ID NO:980: (Length of Sequence = 386 Nucleotides)

AAACIGGCTT GCCTTCATCA TCTCTGCAGG GNTCAGTAAA GATTAGAAAT GGATTATTTA CCTTGTTATA CAAATACACC
TCCTCCCTAC ACCCAAGANT TGAGAGGAAG ATGAGCTGTT CCTGTGTTAA CGCCTGANTC AATCCCATTA TCTGCATTTC
TGTGTGTGGT TAGCGCTCCA GCAGCCTAAG GCGGGAGCTG GAAATGACAG CCTTGGAGAC GAGGAAGGCT CCAGGGAGGA
CGGAGAGGAA CACCTGCTGA AGAATAAGAC GGGCGGCACC AGCCGGGCTG ATTTTGGGGA ACGGAAGGTA ACAGAGGGTG
ATGCTTCTAA TCGCTTTTAC AAGGTCTTGG AAAGACGGGA TNGCCTTAAC CAACTTGGGG TTTCTT

SEQ ID NO:981: (Length of Sequence = 322 Nucleotides)

GITTATIAAT ATTIAAACAT ATTIAAAATAA TACATGINCA TAATGAAAAT GAAACATTAC AAATAAATAC ACAGGAAAGG
CAGTATICCC CITCCAGTIC CACTCTIGAA ATAACCAGTI AACAAGATGA TGAACATCTI TCCATGATGI TCTCCAAGAT
TCATATTATT TITGCAATCA TACAATGGCA TATACAGCTC AGGTGCGGTG GCTCACGCAA GTAAATCCCA GCATTTTGGG
AGGCTGAGGC GGGTGGTTCA CCTGAGATCA AGAGTTCGAG GCCAGCCTGA CCAACATGAA GAAACCCTGT CTCTTACTAA
AA

SEO ID NO:982: (Length of Sequence = 305 Nucleotides)

CCCAAGGCTG TAGTICAGCA TCAACAGGGC AGGGAGCTTG GCAGGGCAAG GGCAGAGCTG GAGATCATGC CCAGINITICC AGGTGCCCTC CCTCCCAATC AGCCTGGGGG GCACAGGACA GGGATGGAGA AGGGGGCTCTC TCCATGGCTT GGGTAACATG CCAAAGGCAG GTCATAGGGC AGACTCAGTG GGGTGGGGG CCTGGCTAAC AAGCAATGGA GAGAACGGGG GCCATCCAGA GAGGTTGGCA GAAGAGAGCC CCTGGGTCAA GAGAAAACTT TGGGGAAGAC AAGACACGGG AGAAG

SEQ ID NO:983: (Length of Sequence = 399 Nucleotides)

AGCCCTIGIT TIGITITIAA AAGCIGICGI GITACIGCIT AAAGTCTCCA AACTGTTATT GAGAACACIG ACCAGAGCCC
TGTCCATAGA CCAGTGTTT TCCAAGTGCA GATTGCAACT CCTTTGCAGA GTAGGTTGIG GAGCCATTIN AGCIGACIAC
TCACCAGCTT TCTTCAAAAT GTAAATGGAA TAGGATAGAA AAATAATGAA AAATTGTAAA GTGAATTGGA TGCAAAAAGG
GTAAATATTG TNGTGCAGA CTTTTTTGGG TGAGTGIGCA TGTGTTCACA TACTGGVTCA CATTATAACA TGTATTGCTC
ATTATGGGTT GTGGTCAGAA AAAATTCAGN AAACGCTGTC TCAGACTGTC CCCAAGTTGT ATTTGCTTAT AATGGGACT

SEQ ID NO:984: (Length of Sequence = 408 Nucleotides)

GIGGIATGAG GIATCAATGA AATACATTIA AGATGIACAT TGGITTGIIT CAGAAAGGCG AGACAAGTCA AAGCGGGAC
TTCCAGGCTA TAGGIAAATT TATACATTIC CIGGITAAGA TIGGITGAGI TIGICTAAGG ACCTGGGATC AACAGAGAGG
AAATGITTGG MITAAGACAA GGATTGIGGA GACCAAAGTI TIACTACGCA GAGGAAGCTC TTAGCTAGCA GGCATAAGAC
AGAAGAGGGCT GIAAAATGIT TICITATGAG ACTGAAAAGG GIGCCTGACT CTTAATTGAT TATCTCCTGG MICTGGAAAG

AAAAAAAAAA GGGAATGCCC AGGIGCGGIG GCTCAGGACG GGTCTGGIGG CTCACACCTG TAATCTTTCT TAAAACGITA
TGAAGTTC

### SEO ID NO:985: (Length of Sequence = 439 Nucleotides)

TOGIATACTI TIGINITITI TICTACTIGI TAGITGTATI AGIATCAAAT GGCATAATAA AGITACITIG TITGCCATIT
CCCACTCATC TGAAAATCAC AAAAAGCATI TATITCTAAG ATTIATATCC ACTGACCTIT TCCCCAAAGI TATITTCCIG
TTACTIGIAT TICATCITIG CCCTTATITC TITAATATIT GIATTAGAAT TAGCTIGCTC TIGITTCCTI CACGGCAAAT
GIGITACATT GCCCACTGGG TGGCTICTGC GGATGCCCCT ACCCACCCCT CGICTGGAGC AGAGAAGICC TGITAGCCTA
GCAGCATAGT GGCTGCTGTC AGTGCGAGGA GITGTGCTTC TCTAGCATGG TCTGTGATGT CATCTGGACA TAATTAATTA
GACTAATCCG AATAGAGGAC CAAGACAGCC CTGCCTGCG

#### SEQ ID NO:986: (Lenc : of Sequence = 286 Nucleotides)

#### SEO ID NO:987: (Le of Sequence = 381 Nucleotides)

TCCAAAGGTT TTCATCTC TGGATAA ACAAAC TG GTACATCTAC ACAATGGAAT TGGGA GATGAAACAG
AATGINTGAG GGCCCAC: CATGTAT GGTC 3G GTCTGCCTCC C. TVTCCA CAGGCA G. IGTGCT
GGGTGAGGGG CTGGGAGG LECAGGAG CATC. LAC AAGGGTGGAA GC GAAGA CGACCAG TL-4CAGGGT
GTNTCACATG GTACAACCAA GAGACTTGGC GTGCT-2AGAA CCAAAGAAAC ACTCAGGACA LACGACAT CTGCAGGGAA
CCTGGGGGGT GGTGAGGAAA GTCGTGCACG GGTGGTTGGG GGGGACTTG GAGGCCCCTC T

#### SEO ID NO:988: (Length of Sequence = 381 Nucleotides)

GAATTAATAC CAATAGAAGG GCAATGCTTT TAGATTAAAA TGAAGGTGAC TTAAACAGCT TAAAGTTTAG TTTAAAAGTT
GTAGGTGATT AAAATAATTT GAAGGCGATC TTTTAAAAAG AGATTAANCC GAAGTGANIT AAAAGACCTT GAAATCCATG
ACGCAGGGAG AATTGCGTCA TTTAAAGCCT AGTTAACGCA TTTNCTAAAC GCAGACGAAA ATGGAAAGAT TAATTGGGAG
TGGTAGGATG AAACAATTTG GAGAAGATAG AAGTTTGAAG TGGAAAACTG GAAGACAGAA GTACGGGANG GCCTCCTTCA
TGTTTACAAT TTTAATTAAT TTTTTTTATT TTAGGAGTAA TTTCTTACCA AACATTACCC A

### SEO ID NO:989: (Length of Sequence = 432 Nucleotides)

GTCTTGGCT STGCAACCT CTGCCTCCTG GGTTCAAGCG ATTCCCCTGC CTTAS NCC CAAGTAGCTA AGACT 3
CATGCGCC ATGCCTGGC TAATATATAT ATATATTTTT NGTAGTTTTA GTAGALACGG GGTTTCACCA CGTT. 3
GCTGGTCTGG AACTCCAGAC CTCAAATGAT CTGCCCGGCCT TGGCTTCCCA AAGTGCTGGG ATTACAAGAA TGTGACCACTG
TGCCTGGCCA ACAATATATA TTAAATAAGC ACACATACAA CAAAAGTAGG TGTTGGTAAG CTTACAAAAA TGTGACCAGT
AGCTTGCTGA AACCTAACTT TTTATTTGTT CATGGAACTT TCTAGACCGT AACTACACTG AATAATGAGA ATCTGCTGTA
ATCTTTTTTTA GGTGCTGTAG ATGAGCCATT GG

### SEO ID NO:990: (Length of Sequence = 421 Nucleotides)

GGCAGCCCTA CTTTINCTTC TCATTAGCAG TTTCAGTCCA CAGCTGGGGT ATTAAATTTG TNAGTCATTG AAATTAATCC CTGACTGAAT TGGAAAGGAA TTGTATTTGC AGTATTTGGA TTTATTTATT TINCAGGTAT GGAATTCTGG TGATTTTGAA

AACATGAATG ATACCATTTT GCAGCAGCAT TGTAGATTTG TAGTATTTTA GATTGGTATC ACAGTGCACC TGAAAAGTAA
GTTTCATTTT ACTTTTTINA TTGTTGTTGA GACGGAGCTC ACTTTTGTCA CCCAGGCTGG AGTGCAGTGG TGTGATCTTG
GCTCATGGCA GCCTCTGCCT CGCTGGGTTC AAGCGATTCT CCTGCCTCAG CCTCCCGAGT AGCTAGGACT ATAGATGCTC
GCCACCATGC CCAGCTAATT T

SEQ ID NO:991: (Length of Sequence = 351 Nucleotides)

CCTCACTCCC CGCGCTGCCA CCTCAGGTTT ACAAGAAGAA CTAGGAAATA ATGCCGGCCA CGCGACCCCT GGAGAGGGG CCGGCTAGAA CAGCGTTCCT AAGAATCCGC GCCACAGCAG GTCCCGCGAT GTTGGGGCCT TAGTGTCATC GAGCTAGCCC CAATCCTCAA CCCGATCTTC AACTTCTGGT AGTCCTAACA GAAGTCTCGT ATTGAACCAG CCACTINTGGC CAGGGAGAAG TAATCCTCTG ATAGTTGAGG TTCTTTNCTC TCCTCTGGAG CAGATAGTGG TGTCTCCTCC CCACAAAGCT CATGTTCTGC TGGAAGAAAT GGAGATGGCG CCCTGGAAGG C

SEQ ID NO:992: (Length of Sequence = 406 Nucleotides)

CCAGAAAAAA TGGCCACTAC TACCACTIGG CICAGAAATG CIAGICTITA TITINCIGAAA TGTITTATAT AGAAAAAATT
TAATAATAAA TAGACATTCI TATATATTIC CITACCATTI NAGATIGGGI TAAAAAGIAT GGNGACTICC GGCCGGGIGC
GGIGATICAA GCCIGCAATC CCAGCACTTI GGGAGGCCGA GGCAGACAGA TCATGAGGIC GGGATCIGIG GCTAACACAG
TGAAACCCCG TCICTATTAA AANIACAAAA GGAATTCCIG CAGCCCGGG GATCCACTAG TICTAGAGCG GCCGCCACCG
CGGIGGAGCT CCAGCTTTIG TTCCCTTTAA GIGAGGGGIT AATTTCGAGC TTGGCGIAAA TCATGGTCAT AGCTGTTTCC
CGIGIG

SEO ID NO:993: (Length of Sequence = 381 Nucleotides)

ATGEAAGGAC CGTGCCGGGA CCCCAACGAG GCANTGCGGG AGTTTGCCAA GGAAATTGAC ATCTCCTGTG TCAAAATTGA
GCAGGTGATC GGAGCAGGGG AGTTTNGCGA GGTCTGCAGT GGCCACCTGA AGCTGCCAGG CAAGAGAGAG ATCTTTNTGG
CCATCAAGAC GCTCAAGTCG GGCTACACGG AGAAGCAGCG CCGGGACTTC CTGAGCGAAG CTCCATCATG GGCCAGTTCG
ACCATCCCAA CGTCATCCAC CTGGAGGGTG TCGTGACCAA GAGCACACCT GTNATGATCA TCACCGAGTT CATTGAGAAT
GGCTNCCTGG GACTCCCTTT CTTCCGGCAA AACGATGGCC AGTTTCACAG TTCATCCAGC T

SEO ID NO:994: (Length of Sequence = 384 Nucleotides)

GITCITCCAG TICGGAAGGA TAAAATCAAA TICCCACITI CIGGGIGGA TGCCCAAAAC CITCACAACT CAAGIGITCI CCAAGIGCAA AIGICAAAAT GGGAGGAGGA AAGGGITTAA AAATTAGAGA AAACIGTATG CACTTACGGA CITAAAAATC CGGAAAAAAACA TAGCATTATG CTCTGAAATC ACAACCAAAG CCAAAATAAA AGGGACATTT TICACCIAAA CIACCIAGAG GGATTITTITG TITAGITTIT CCTTTTTCTT TITTITTITCA TITTCCAGIT AAGICCIATG TCTTTINGIGA AATTCCAATA CITAAACIGC AAGICIGCAA TCGTCTCTGA AGTCAGTGAA ATTA

SEO ID NO:995: (Length of Sequence = 386 Nucleotides)

ATAACTITAA CAGAGGATTG GAATAATGAG GGATTGGCAA GGAAGCAGTA AAAGGGAACA CTAAAGTATA GAATAATAGC
AAACAGAAGG AGCACCCTAC CCCTAGGGCT GAGAAAGAGC ACAGGGAAGT CCTTTTTTTT TCCTGGACAG AGATCCAGAC
GAGCTGGAGA AAGAAGTTGC TATGGTACTG CATCANTGGA ACTTGCTGGA AATCCACCCT CAAGGGCACT AGGAAAACCT
GTTCAGGGGA GCTGTGGAGG GAAATGGGGT TGGCAGGAAA GCTGCTGGGC GCGGGGTGCT TCAGACTGCA GTGTATTGCA
GGACCTTGGG CACTGGGGAA GCTGTGTGCA CTGCAGGATC CTGCTGAGCC AGCACATCAG ATCAGG

SEQ ID NO:996: (Length of Sequence = 307 Nucleotides)

GTGCGCCAAC TGCAAGAAGG AGGCCATCTT TTACTGCTGT TGGAACACCA GCTACTGTNA CTACCCCTGC CAGCAAGCCC ACTGGCCTGA GCACATGAAG TCCTGCACCC AGTCAGCTAC TGCTCCTCAG CAGGAAGCCG ATGCTGAGGT GAACACAGAA ACACTAAATA AGTCCTCCCA GGGAGGTCC TCGAGCACAC AATCAGCACC TTCAGAAACG GCCAGCGCCT CCAAAGAGAA GGAGACGTCA GCTGAGAAAA GCAAGGAGAG TGGCTCGACC CTTGACCTTT CTGGCTCCAG AGAGACG

## SEO ID NO:997: (Length of Sequence = 402 Nucleotides)

TCTGCACCTA ATACTGAGGG TGTGAAATCT TCCTCAGTAA TGCCCAGCCC TAGTACCACA TTAGCGCGGC AAGGCAGTCT GGAGTCACCG TCGTCCGGTA CGNGCAGCAT GGGCAGTGCT GGTGGGCTAA GCGGCANAGC AGCCCTCTCT TCAATAAACC CTCAGACTTA ACTACAGATG TTATAAGCTT AAGTCACTCG TTGGCCTCCA GCCCAGCATC GGTTCACTCT TTCACATCAG GTGGTCTCGT GTGGCTGCC AATATGAGCA GTTCCTCTGC AGGCAGCAAG GATACTCCGA GCTACCAGTC CATGACTAGC CTCCACACGA GCTTCTGAGT CCATTGACCT CCCCCCCAGC CATCATGGCT CCTTTGTNTT GGACTGACCA CAGGCACTCA CG

### SEO ID NO:998: (Length of Sequence = 304 Nucleotides)

GCAGAGAGAG CACGCATTOG AGTACCCTGG
CTCCCAGCC CTTCCCCACC CCGTNTTGAG CCAGAGAGCT ACAAGCAGGA ATCCCAGTGC AGCTGCAAAT NATGGCCATC
GAGGAAGTCT GTGGAGAAGA GGCTGGGGGC TGTGGTGCTG AGGGGGGCTA GGCTCAGCAC GGGACCACCT GACGACAGCT
CCCAGCCAGT CCATGCTGTC CAGGTGGCCA TCAAGCCAGG TTCCAGGGCC CATGGGTGCT TGCT

### SEO ID NO:999: (Length of Sequence = 321 Nucleotides)

AGAATGGTTT TGGAGCTCGA NATCTICATG GGTTAGACTT GCTGGTCAGA CCCAGGAGCA CCTGTGGCTC ACACCTTCTG
TNCCCCTCCT GGCCTGTGCA GAATGTAAAC AGCAGGACTCA TACTCAATGG GCACTACAGG CCTTATCAGA CGTTTTATAC
AAGCCTGGAT TGCTTAGTAG GGGAATAAGG CATTCTCTGA GGGGGCTTTC CACTTAGATT GAGAATTTTA TTTGAAAAGA
ATCTGGTTTA AATGGCATTG TGGTCCGAGG TAGCTGCTCT CCCCACTGAG AGCTGAGCCG AAATATAAGA ATAATATATT
T

### SEO ID NO:1000: (Length of Sequence = 253 Nucleotides)

CCCTAGAGGA TITICCCGTCT TINATCTGCC AGTGACCTGA ACCACGCAGA TITITCAAGC AGGAGGGCCG ATTGGGCAAC CACAGCTCCC GTGCTCTCC TITIGCAGTGC GCGGCTTTCC CTCCGAGAAG GACTTTGAGG ACTACATTAG GTACGACAAC TGCTCGTCCA GCGTGCTGC CGCCGTGGTC TTCGAGCACC CCTTCAACCA CAGCAAGGAG CCCCTGCCCEN TGGCGGTGAG ACGTGCGGCC GGG

# SEO ID NO:1001: (Length of Sequence = 164 Nucleotides)

AAACAGAGIA CIGGGATGIC ACIGITGGAA AGIGCICACA ATTICICATC TAAGCCGAAG TIGICIGINC TCCITCCTAC
CITAACAGIT TCTCACIGCC TGAAGGCAGC TGCCAAAACC CCTCIAAGCA AGCAGCACTC TTACCCACCA AAATCTATGA
CCTC

### SEQ ID NO:1002: (Length of Sequence = 262 Nucleotides)

ATATCTTCCT GAGGGAAAGT GGTAGAGTTA AAGAGGGCAT AGAGAGCGCA CTCATGCATT TACAACTCAG AATTITAAAA AAAGTTTACA TTTTGTCATT TGTACTTCAG ATGAATTTNC TTATTAAAAG AAATAAGGCC ACAGAGGTAA ACTTAAGTCT CCIGITICCC AAIGCCIACC CICCITCITC TCCITTCCIC TITCICTITC CTAGAGAAAT CCIGCCITCC TITCCCITCC CAGAGGCAAC TGGCATTATA AT

- SEQ ID NO:1003: (Length of Sequence = 267 Nucleotides)
- CATTUTCACE GIGGIGATTE TAATTAGACE ACCUCCEGGA ACCUCAGACA CTUGGGGCCT GGAGTTCCTC CCCCTGCCTG
- ACCTAGAAGC AGAACCGITT TCAGCGVICT GCCCTGTTGG CTTTAAGGCT TTGTCTTAAT TTAAGGAAAA AGATCCTCCC
  GGGTTTTATT TCTCTCTTTC TTGAGTG

### SEO ID NO:1004: (Length of Sequence = 277 Nucleotides)

GGCTCCIAAA CACTITCITC CIGAGATGIT AAGCAAAGTA ATCATCCTGI CACTAGATAG AAGCGATGAA GATAAAGAAA AAGCAAGINC TITGATCAGI TIACTCAAAC AGGAAGGGAT AGCCACAAGT GACAACITCA TGCAGGCTIT CCTGAATGIN TIGGACCAGI GTCCCAAACT GGAGGITGAC ATCCCTTTGG TGAAATCCTA TTINGCACAG TITGCAGCTC GTGCCATCAT TTCAGAGCIN GGTGAGCATT TCAGAACTAG CTCAACC

### SEQ ID NO:1005: (Length of Sequence = 271 Nucleotides)

GTTAGGICAT TCACACATGG TGGAGACAGG AATCTACAGA CTAGGGATCA GCCCCAAGGC TATGATCTTT GINCTGCGCC
GCTCTACCCC TGAGCAGACG GGCCAGAGGT CCAGAGAGGG CTGTGCTGGC AGAGTTCATA CTTTGATAAC TGAACCCTAG
AGTAAGCCTG CCCTGGGAAA TNCCAGGTCA AGGGACTGAC AGGCATAATG CTCTTTGGGA GAGAAATGCC ACATCTGCAG
CGACACGNAT CCTTAACACT GTCCCAGGAC T

#### SEO ID NO:1006: (Length of Sequence = 336 Nucleotides)

TATTITINCAG ATATGGATAA AAATTGCITA GGAGAGIAAA GAGAGACAAA GITGAAAGCA GGITTATAGT AGGTGITGIT
TTAGTGITGA TCCCTTTTTG CTCCAATAAT CAAAGTGATA AATATTGAAA AITGATTCAT GCAGCATTAC TTACTCCATT
CTAATTTINA TATATGTCAA AAGTGCCATC TCCCAAACTG TGCTATCCCC TTCAGGAGAA GAGACTCTGC TGAAGTTTAT
AAGGTTGACA TATTGCCAGC TTCAATAATG TAAAGATGAA GTGTATACTG GAATTCTTAA TGCAAATAAC AACTCTTTTG
GGAAGTAACC CCGTTT

### SEO ID NO:1007: (Length of Sequence = 355 Nucleotides)

GECAAGAAGG CGICGGCGGC GCANIGCGGA TCCAGAAGGA CATAAACGGC AGCTIGITCC TCCAGGCTGG /TGGGCTINGT GCCCTCGGCC TIGGGATGCT TATCACAGIC CTITGGGACC AGAACACTGG ATATCAGINC AGCCTCTGGG CCAGCTTCAG AGGCTGTTAG AGCATCATTG CTGCTGTGGC TGATGCTTCC TTTCCTCAGI AAATCACAAA AGTCGTGTTG GCCATCCAGG TTACCGAGTG ACTTAATTTC CAGAAAATTT AATATTGAGG TCATTATTGT ATGCATTTTC ACTGTTGCCA TTTTTGTATC CTCGTAGGTA GGTCTATGAA GTACCACTGG GGTCA

#### SEQ ID NO:1008: (Length of Sequence = 269 Nucleotides)

ATATTIAAAG AGAGCTITIGG TCAGTAAAAAG TATAAAANCT GAGCTITIGGI AAGGGTACAG TTTATAAGGC CTAGAGAACA
TCAAAACATT CATTICATAT TGAATGTATA AATACCCACA TGTGAGAGCA CATGITGATT CAGTTTGAGT ATGTCTGCCT
TGTGGNTCTT TAAAACCTTT CCAGCCTGGG TTATTTTCCC AAGCTTTCTT TATAATTACA CCAGGGAAAG AGTTACCNGG
NATTAATCAA AACCAGACAG TGGACAATG

SEO ID NO:1009: (Length of Sequence = 295 Nucleotides)

GATAGCAGCA ACATACGITT GITTATTCAT TIGCITACIT ACAACAACG TITATTCATT ATTTATAATG CAACAAGCAT TAACCTAGGT GCTAAGGAGA GAAAAATGAG TAAGACACAG TITCTITCCT CAAGGAAATC ACAGICIGIT GGCAGAGATA AGITAGTAATG GTGCCTAATA TAGGTAACAC TIGCTACCTG CTCCAAGAAC AAAGITAAGC AAGIGATTAA GTTAAGCAAT GCTTAGAGGT AGAGGATGTA AGANTGGCT TAAAAAATGT GTCTTCTGAG ATGAG

### SEO ID NO:1010: (Length of Sequence = 356 Nucleotides)

GIATTICCIC ATTIGIGCAA ATNAAATAGA AAAGGTAAAT NAGAAACICA AGAGGTITGI TACCIACIGI CAATGGAGTG
GGGAAAATGG GIGGAAAGAA GAAGGCAATA AGAAAAGAGI AACAGGAAAC GACAGINGAC ACTICIGAGT ATACCITGIG
GAATCICITT CACTCITAGA ATCATAGTAA TAGANGANGA AAAAAGAACI CCCCAAACTG AAAAGGATAG ACCACTGGAA
CAACTICAAG TGGICTAATG TAGAAGCAAA TGGAGTCCCT CAAGGAAAGA AGAGAGGTIT TGAAAAGAAA AAAACATTIG
AAGAGTTAAC AGGGAAACAC TTTCCAAACT TAAAGG

# SEO ID NO:1011: (Length of Sequence = 315 Nucleotides)

AGAGAGACAC AACTGTAATA GAGACACAGA GGAGTGGCAC ACAGAGACCA CCTCCCAGCT GGAGACAGTC AGGAAGGACT GAGGAGAGAGA GAGAGAGAGA ATGGGGAGAGAG GCCTGTGGAA CAGAGAAGTC ATCAACACAC ACAGTTCAAA GTCTACCCTA GGCTAGGAGG GGGAGCAGGA AGAAGGGGCA GGGACGCAGG GGCCCGGCCT GCNAGCTCCC TGTTGGCCCC TGCTGGCTCC CNCTGCGGTG CTCAGGCAGG AAGAGAGGAG GCTGCTGTTT TTAGG

# SEO ID NO:1012: (Length of Sequence = 272 Nucleotides)

CCCAACTCIA TAGCCCIAGI CAACCACTAA TCTATACCCT GINCTCIATA GATTIGCCTA GICTAGAAAT TTTGTATAAA TGAAATGCAT GCACTIGAAC TTTTIGIATC TGGCTTGCTT TTCCATTIAG CATAAAGTIT TAAAGGICCN CATATGTTGC TGCATGTGIG CATTTCTTTT TGTGAACTGC NATATTACAT TGTATGGGAT ATACCATTTT GCCATATTIN GITAAATCCA TTCATCCAGT TGGTGGGACA GCAGGTTATT TC

# SEO ID NO:1013: (Length of Sequence = 252 Nucleotides)

TTTGTTAGTG TTTTCTACAC TACACTCAAG TTCATTCAGC ATGTCATTTC AACAACATGT GACGTGTCAA CTTCAAAAAAT TAAACAAAACC AGCNAAACAA AACACTTGNC ACTACAAAAGG AACTTGTTTT ATTCTCAACC TTCTATGATA GCTAAACTTC TCTCAAAATTT NGTTCCCCCA CACATCCCAC ATCTGGGCTC AATTTCCAGC TTCTGTTNTT CTGTTTTATT TCATCCAAAA TGTTATTTTA AT

### SEO ID NO:1014: (Length of Sequence = 210 Nucleotides)

GGGATACACT GACAGTAATG TGAAGCGCCA CACTTGCAGA TTTCAGGCCC AGCAGGTCCT GGNCAAGTGC CATTCCACCC GGAACTTTTA ACCCAAGCGG TGGGGAAGGA AAGCCAAAAC TCCAAGCTGG CACTTTTTTG GGGTTCTGGG CCATGACACT TCTTAGGCCT TCTGCTGCTG AACTTTTACA GGGACAAAAG GTACCCCACG

# SEO ID NO:1015: (Length of Sequence = 222 Nucleotides)

GENAAGAAAG GITTCTCAGA GGACAGCCIT ATTAATITCT CAGAGGATGA ATTTGNACAA TGGCAGCACG TTGCAGTCAC
AACTTCTIAA GGIGCITCAG AGGCTGATTG TTCCTAGNAA CACAGAGTAA TGAACTATTC CTGAAGAGCA ATGAAACAGG
TTTTGAATTT TNITGTATCT GNACTTAGNA ACACATCAGT CCCCATCAAC CCATGGACTT CT

SEO ID NO:1016: (Length of Sequence = 236 Nucleotides)

GAATAAACTG GITTGGAACC AGAAAAGTAC AAAAAAGAAC AGCIAGAGGI ACATAGACA AGGACAATTA ATCAATTTGG GAAAAAAAA AGNACITACT TTCTCCATTG CIGCCIGAAT TGITTCCCAA TCTGCCITGA AATGCCACTT TIGGCCAATA TTTTINCAAA AATTIGACCA AAAAAGAAAA AGCACINAAT TTCCCITTIT ATACAAAAAT GNITAAGTAG GCAAGT

SEO ID NO:1017: (Length of Sequence = 259 Nucleotides)

GCTTCCCTAG ATTITTCCCT AATTITGGAC CTATGTGGAC AAAAAAAAA ATCTAGTCCA AGCTTTCACT ACCTTCTTTT

TTTATTCGCC TTCTGCTTCT GNGTTCCACA TGGGAACTTG AAGTGGTTTA TAAGAATGCC ATGCTGTGCA AATAGTAAAA

ATGAATTTNC TGATTTTTAA AAAAGCCCTC AGGAACGGCA TATGTATANG GTATGTATAT GAAAAAANGT GTTNAGGAAT

GCAGGAGGGA AACTAGGCG

SEQ ID NO:1018: (Length of Sequence = 354 Nucleotides)

CTGGAGGAGG AGAAGAAGCA TCTGGAGTIT ATGAATCAGC TAAAAAAATA TGATGACGAC ATTTCCCCAT CCGAGGACAA

AGACACTGAT TCTACCAAAG AGCCTCTGGA TGACCTTTTC CCCAATGATG AAGACGACCC AGGGCAAGGA ATCCAGCAGC

AGCACAGCAG TGCAGCCGGG GCTACCAGC AGGGCGGCTA CGAGATCCCC GCGCGGCTGC GGACGCTCCA CAACCTGGTG

ATCCAGTACG NCTCGCAGGG GCGCTACGAG GTAGCTTGTC CCCTNINCAA GCAGGCCCTG GAGGACCTGG AGAAGACTTC

AGGACACGAC CCACCGGAC GTGGCCCACCA TGCT

SEQ ID NO:1019: (Length of Sequence = 393 Nucleotides)

GATGACCGAT TIGGCCATGG AAGACTTATC TICATGGCAC AGAGACNYTG TSCAGAGATG AGTCAGACTC AGGGCTGAG

TAACAGCAGA GCAGAGAGTG CAGAAGTGGA CGCTCAGAAG CGAGTTTATG TGTGTYTTTY CCTCTATCTG CTGGCTGTGG

CTGGTACTGC AACCTATCCC AAAGTAACAG CCTAGTCAAT GAGGTATATG CTTCAGATCT GGCAAACTCT CTCTGCACAT

AAAACTGTTA TTCTTAGTTC TCTGAAAGAC CCCCACATCT TTGAAGTGTA AACTAAGAGC TACATTTTCC CTTTTACTAC

ATCTCCCTTA AAAGGAAAGC ACTACAAGAG CTTTAAAATA GCAAGCTTCC CTATTCTAAG GGGAAANAGT CTT

SEQ ID NO:1020: (Length of Sequence = 403 Nucleotides)

CIGAGGAAGA GAGGIGAAGT GGCATCTACC CAAAACACCT GIGTACTGGT TAATAAGGTC GGTAGTTCCC ATTAATGAGC

TIGATGAAGG ATGGCACCTG ACAGGGCCTT AAATGANCTG ATGGAGTGAA TGINACCAGT GIGAATTAAA TTINCTTTAT

ATATAATAAA TAGCIGIGCT TACACATTTT CAGATTTNCT TIGTCAGCTA TGGACATGGA ACAGCGGGAC TATGATTCTA

GAACAGCACT CCATGIAGCT GCTGCAGAGG GIGATACAGG AACTACTCCT ATCTATTTCC TTITCCAGATT TAATTTCTAC

TTAGTACTAA AATCTGCTCT TTTTTTGGGG GIGGGACGGT ATAGGTCATG TTGAAGTTGT TAAATTTTTT NCTGGAAGCC

TGC

SEO ID NO:1021: (Length of Sequence = 452 Nucleotides)

ATCGCAACCT GECAGGGGT TGGGGTTTGC TGGGGGCCTC TGTGGGGCCA TGATCTGAGG AGGGTATGTG GGGGGGGGA
GCTCAGCACA TTCCATGGCC TAGAGGGGCC ACACAGAGGC CCCAGTGGGA CCCATGGCGT GGAGGCAGGT ATGGGGAGTT
KTGGGGGAGAT CCCAGGGTGG TCTGGGGCCT GGAACCGGCC ATTKGGAGGC CCCAGCAGTT TCAKTGCCCA GGGCCTCCCT
GCAGAGCCAT GCATGGCAGA AGAAGTGTGT AGCATGAGCT GGTACACGCC CATGCCCATC AAGAAAGGCA GTGTGGTCAT
GCGTKTGGAC ATCAGCAGCA ATGGCCTGGG GACCTTCATT CCAGATAAAA GGTTCCAGAT GATATCAACG GCTTCCTGAA
GAGAGACCCG GGCAATAACA TCCATTCANT TGGGAGAGGGA GGTGAGGGAT NT

SEO ID NO:1022: (Length of Sequence = 413 Nucleotides)

AGCAACAGAA GAAAGGCCA CATATATGCA AATGCCTGGT CACTATATCT GGCCCTGAAG AAGGAAGGAG TITGCAGGGC TCAGGAGACA GAAAACATT NCCAGGAGCT AGGAACGAGG GGTTGGGAGA CGTTGGTCAA AGGGTACAAA GTCCCAGTTA TGCAGGATGA ATAAGTTCTG AAGACCTAAC ATACAGCCCA GTGACCATAG TGAATAACAC TGAATGANCA GTATACTCGA AATTTGCTAA CAGAAGAGAT CTTAAGTGTT CTCATAACAC ACAAAACATA GCAACTGTAT GAGGTGATG GTATATTAAT TAGCCTGACT GTGGTTATAC ATTTTATCAA AATGTCACAC TGTGGCTGAG TNCAGAGGCT CATACCTATA ATCCCCANCA TTTTTTGGGGA GCT

# SEO ID NO:1023: (Length of Sequence = 379 Nucleotides)

TCAAGTCICA AAACTITAAA AGACAGTAGA TATTIGTGGI TITCTAGCTA AATGAGGGCC AAGATTGGIC TITTTCAACT
AAATTGAATC ATGTAGTATA TCTGATTTCA TAGCTITCTIG GGGGAAAAGG GAGGATTTGA ATTAGCAGCA GTGCAGGTCA
GGAGCAGTAA AGAAGACAGT AGGAGGAGTC CAACTACAGA TGTGAATGAN CAGCCTCAGA GGAACACATG AGAAGGTGAC
CTGCTGTTTA TCAGGAAGGC GGGGCTTTCT CTCTAAGATA CAAACCAAAT AGGAATCGTC AAATAGTTCA AATTATCCGG
GGGAAAAAGC CTGAGCAATG ATCCCTCTGG AAAACAAAGC AGTTCTCAGG CAGCACCTT

# SEO ID NO:1024: (Length of Sequence = 320 Nucleotides)

AGICITACAGG AACAAAGAAA TCTAAGATGG CIGCTCAGCC TIGAAATGTA CATGITTIGC AGCAAAGITG TIGAAGAACC
TICCGTIGGC ACAGATIGIC CITTITCACA AGCATACAGA AGCCTCCTIC CGCCCAGGNC TCTTCCGTIG CATCCTIGCA
AATGGCTCCC ATTIGACACA TICCTAAGTC TAAGAGATAC CCACTAGGGC AGCTIGIACA GITCITGAAT CCTGGGCCAT
TGCACGICAA ACAACTGATA TCACATTITI TIGCAGGACT TGTATCCATT CICTGAAGAG TGGTCAAAGT AATAGCTGAT

# SEO ID NO:1025: (Length of Sequence = 368 Nucleotides)

TATTITAATCA TICTITICIT TGCCIGAAGA CITAAAACTA AGAAGATTAT TCGAATGGTG AATTAACTIG TIGAAGAGAC
TATTCCAAAG GGATAGAATG AGACTAATTY CIGACTATGI TITGCIAGIG ATGCGTGGAT GGGAACAAAC ATTACAAGAA
ATAGCATAAT GAATGTAGAA AATATTTCAG TITGGAGATG TGCATGANIT AGITTCCTAG GITTGCCACA ACAAAGCATC
CCAAACTGGT GGCTTAAAAA ACAGAAATTT GITTCATGGT TCTTGAGCCT AGAAGGTCAA AATCAAGGTG TTGGCAGGAC
CATGCTCTCT CTGAAACTCT AAGGGAGAAG CGTTCTTTGT TTCINCCT

# SEQ ID NO:1026: (Length of Sequence = 379 Nucleotides)

GGIGCAGGIG CATACAGGAA GGACCATGIG GGCTCAGAGC AAGGGGGCGG CCATCTCCTA GCCAAGGAGG GAGGCTCCA GGGACCCCAA TCCTGCTGGC ACCTAGGCCT TGANCTTCCA GCCTCCAGAC TGGGAGAAAA TAACGTCTCA TTGTTAAAGC CCCCAGCAAA TGANTACAGA ACCTAGGAAG GGGCAATGAA TGANTGATAG GTGGAAGGGC TAAGAAGAAA AGAGGAGGGA GAGGAAAGAG ACGTGCTCAG ATCTGTCTCI NCTGGACATC CGATCCCAGG CTGTCTCTTC AGTGGGNCCA AGTCCAACTA GCAGTCAGCT CAGAAATAAT CCCTNAGGCA TCGAAGCTTT CACAAAGGAG GNCACAAAA

# SEO ID NO:1027: (Length of Sequence = 411 Nucleotides)

GCCCTTGGCA CCTAGAAGCA GCCAGGAGGG AAGTACTGAC CATTTAAAAG TGGCAGATCT CCGGGCCCCA TITCTGCAGC
CTTCATTCTG CAACTCCAGG GAGGGTATTT TINATTTGTG GGTTCAAAAA ATCTGTATAT ACAGTCTATG TGTTTAGAAT
TTGTGTTGTA AGTAAACTAC AGCTTTGAGT TGGAAAGAAG TCACGGGTTG TAAAACCATT TGGATTTTTT TAAAACAAAA
GTATTAATAA TCTGGAAGAC AGTNTTGCCC AGGTCAGGAG TGTTTTCTTG GTGGTTCCAG CCCCCATCAA TTGAACTGTT
TCTGGGCTCA GTCAGACACA GACATTCATC TGTGTCTGAC CAAATCAGGG GCTTTCCCAC CTGTGGGGGA GGGCACAGTT
AGGATGTTTT T

SEO ID NO:1028: (Length of Sequence = 401 Nucleotides)

GATCATCATG CAGCICAACT TICTGTTGGA TICCATGCTA AGCAAGCTAA CCTTATCCTG CATTGTTAGC ACTAGGCACC

CAGCIGCCAC CTCTCCATCC TGCTGCCCTT AGGCCACATG GGAGCAGTCC ATGCATGACA GCCTCTATCC TACAAGGCCT

ATGAGTATGG ATTGGGGGGG CCAAAAGGAA AAAGCTCCAT GTGCCTCTTT GTCTGCGTGG GTCAGAAGAG TTGTGCACGC

AGATTAGCAG GCCAAGGTCT GAGCCACAGC AGCATTTTTA TTTCAGATTT TGATAACTGT TTATATGTGT TGAAACCAAA

NTGNCATCTT TTTAAAGCTT ATCCATAAAA AAAAATAGAT GTCTTTTATA GTGGGAAAAC ACATGGGGA AAAAATCATC

TATTTTGATG CAGCATTTGA TAATGNTTAA ACACCTCACA CCTCACTCTT

GAAAAATGCC AATTGGATGC CCTTAGGTGG AGGIGAGAAA ATGGCATCCT TGCCTTCTTC TCAATATGAA ACATTAACTA
GTTGACAAAT TTATCCTTGT AGAAATGAAA ATCTATTTAA TCAGGGACCA GAAATGGCTG AGGAGATAAA TGCATCATTA
CAAAATTCTG CTTTTGAATC CTGGACATTA CAAGGGGGTA AATGCAGCAT GACTTTTTGT TAACCACATT CCAAAATGTG
GAACATTTCT TTTAGAAATG AAAATATTTC AAGGCTGATG TATTTTAAGN CTACACATTA TCAGGGNCAT ACATTGAGAG
TTCGCTTAAT TAAAGGTTGT TGGGCATCAA ATTATGTTTA GTAGGTTACT ATTCTCTAAC AACTCAAGGN TGCTTTAATG
G

SEO ID NO:1030: (Length of Sequence = 340 Nucleotides)

TICCCGCITG ATTCCAAGAA CCTCITCGAT TITAATITIN ATTITTAAAG AGGGAGACGA TGGACTGAGC TGATCCGCAC
CATGGAGICT CGGGICTIAC TGAGAACATT CIGITTGANC TICCGGICTCG GAGCAGITTG GGGGCTIGGT GTGGACCCTT
CCCTACAGAT TGACGICTTA ACAGAGITAG AACITGGGGA GTCCACGACC GGAGTGCGTC AGGICCCGGG GCTGCATAAT
GGGACGAAAG CCTTINICTT TCAAGATACT CCCAGAAGCA TAAAAGCATC CACTGCTACA GCTGAACAGT TTTTTCAGAA
GCTTGAGAAA TAAAACATGA

SEQ ID NO:1031: (Length of Sequence = 452 Nucleotides)

CCAGGGGAAG GNTCCCAAGG GACGGGCTGG CAGCCGGACA CATGGACAAA CTGATGGACC CAGGACTGAT CAGACAAAGC

TCTCATTAGC AGAATGTGGG CACCTGCACC CAGGGCCCAT ACCACGTCCC TGTGAGCAAA AAAGCTTAAA GTTCTCCCTC

CAGGCCCAGG GCCAAGAGGG CCTCACAAAG GGCTGCTGCC TTGAACTTGG CCTGGGGAAA TNAGACCCTG AGCCGACCAC

AGCCCTTGAG CCCTGGGAGG AGCAGCCCAT CCAGNAGCAG CACAGCTNCC GAAACTTGAG GAAGAAGACT TCCACCCATA

GCACAAGAAC TGCAAATACT GTCTNGGNCA GAGCCACCAG AGGCCTTAGG CTTCTTAGGA CACCGATATC CCCCATTCAT

GGGGTTNGGA GGGAGTGGCT TTTTTAGGCA AGGGACTTTG TTAGAGAGGT TT

SEQ ID NO:1032: (Length of Sequence = 411 Nucleotides)

GAATCIACAG AAACATAAAT TATACTGAGI TGIGCIGIAC TGGITTGIGA GAACATCAGI GIATTAAGGA GAATGGIAGI
TTAATTIGAA TATIIAAAGA AAGIAATTIG AATGGITCIA GIACTAGGGC CATIATTAAC TAGIAACATA GATTAGIGAC
TTCAACTGGG TGICCITATT ATCIGATTIG TCIGAAGIGA AAACIGITAA GGIGCICITT TAAAATGIAT TIGGAAACAC
CATAGITAGG GIAAATNCAA TGICACAATT CACTCITGCA TATTATTINC TIAGCCAAAT TTATGAATIC TAAGITAGGC
CAAATTGAAG GITTGGAGIT TTACATTGIG GGNGAGICTA AATTCATGCG TTTGGCAAGC ACCAAGGNCA TGGGGAAAGA
ATCIGGIATT T

SEQ ID NO:1033: (Length of Sequence = 372 Nucleotides)

AGIGGCTTAC AAAACACAAA TITATTATCT TACCATTCTG TGAGTCAAAA TTCCAAAATA GGIGTCACTA GGCTAAAATG
AAGGACIGCA TITNINCCTG CAGGCTCCAG GAGAGATCTA TGTCTTACTC TITNCGGCTT CTAAAGGCTG CCCACATTCC
TCGACTAGIG GCGTCCCTCC TTCATCTCTA AACCCAGCAA CAACAGGTTG AGTCCTCATG TCACATCTTT NTTACCTTTC
TGTCATCTCA TCTCGCTGAC TGCTGCTGGG AAAAATTCTC CACTTTTAAG GGCTATCATG ATTAGACTAT GCCCACTAGA
TAATACAAGA TCTCAGATCC CTTAACTTCC ATCACATCTG CAAAAGTCGC TT

# SEQ ID NO:1034: (Length of Sequence = 320 Nucleotides)

OGGECCEGGA CEGACECCCT CAACCEGCAA ATCCECCAGE AGETEGCGAG TECAGTEGAGC AGCTCCTACA GGAATGANIT CAGGECATEG ACEGACATCA AGCCTGINAA ACCAATAAAG GCCAAGCCCC AGTACAAGCC CCCAGATGAT AAGATGGTTC ATGAGACCAG CTACAGTGCT CAGTTCAAAG GAGAGCCCAG CAAGCCCAACA ACAGCTGACA ATAAGGTCAT TGATCGCAGA AGAWTACGCA GCCTCTACAG CGAACCCTTC AAGGAACCCC CAAAGGTGGA AAAACCTAGT KITCAGAGTT TCAAACCAAA

# SEQ ID NO:1035: (Length of Sequence = 375 Nucleotides)

TITTITITIT TCAGIGGAAA ATAACITINA TIGAGACCCC ACCAACIGCA AAANCIGINC CIGGCATTAA GCICCITCIN CCTTIGCAAT TCGGICTIC TICAGIGGIC CCATGAATGC TITCINCICC TCCATGGICT GGAAGCGGCC ATGGCCAAAC TIGGGAGGIGG TGICAATGAA CCTTAAGGICA ATCTICICCA GAGCCCGCCG CITCGICTGC ACCAGCAAGG ACTIGCGGAG GGIGAGCACC CGCTICTITGG TICCCACCAC ACAGCCTITC AGCATGACAA AGICATTGGT CACTICACCA TAGIGGACAA AGCCACCCAG AGGGITGATG CICTIGIMAG ATAGGICATA GICAGIGGAG GCATT

# SEQ ID NO:1036: (Length of Sequence = 304 Nucleotides)

CTCTATGTCT TCTTCTTTT GCTTCTCCTC AAGTAGAG J TGACTTTTTT GAAGGITAGC TTCTTCTAAG AGTTGCATGC
TATTNCTGGC TCTTACAATA GCCTCATATC TCINATTINC TAATTCATTG CACTTTGCTT GTAGCTCTCT GGTCTGTTTT
TCCAGATGTG TATTNCGGN TCINAATTGG TTGGCTTCTT GGATTGTCAC ACATAATCTT ATTTCTAATT GTTTTATACT
AGACTGTAAC TGCTGTAAAC GGCTATCTGA TGCTTCCTCT CTINCATGGG CAGACACCAC ATCC

## SEQ ID NO:1037: (Length of Sequence = 341 Nucleotides)

CTATGAGGAC CAGCAATTAG ATTITATAGC AGTACITCCC ATTAAAGTGA ATAACCAAAA TCACTITAAG GTCAAGATCT TAGTCAATAC ATTATGTAAA ANCATATACA ACAGACAATA CACCAGAAAC TAAATCITTT GCAACCTTTT AAACTTATGA TGAAAAACAT TAATGTCAGC TCTAAAATGT ATTAAGCAGT TTTTACAAAA AAAATGTATA GAATACAGGA GCCAAAACAT TTANCAATTA CCCTAACTTG CTGACACAGA NTACTATTAA TAAATAATAC TGATCANNEN AAAGTAATCA ATTIGAAAGT GGTGGGGGTA GAAGGACAAC A

# SEQ ID NO:1038: (Length of Sequence = 281 Nucleotides)

# SEQ ID NO:1039: (Length of Sequence = 246 Nucleotides)

CCAATGATGG CAAACATGAG GATGGCAAAG AAGAGGAGCA GCCCAATCTG CAGGAGTGGA ACCATGGCCT TCATGATGGA CTTGAGCACC ACCTGCAAAC CTGGGGCCAG AACAGGGCAG GTCAGGAAGC AACGTGGGCA GGGTAGGGCA AGGAATTTNG TGGGGGCAGG GACAGANCAG CAGGAACCTA GCAGGGACAG CAAGGTGCTA AGCAGINAGT GCTITCAAGG GCAAAGGTTA GAGCTG

SEO ID NO:1040: (Length of Sequence = 399 Nucleotides)

GAGGICAAGA AGAGCITAAG AAAATATAGG AGATACTACA GCATGITTGG TTCATGACCG GAATGATTTA GTAAGAAGGA
AAAGCCAATA ATGTAAGAAA GGCGATTGCA GGAGCCAAAGA CITTAAGGAA TAAAAAGGAC AAAATTGTTT GTTCTCAGG
GAAGTAATGA CAGGGGCTGA GCAGGAGCCA GGAAACCCAG CITTTAGCTT CAGNTCTGCC TGACATTTAT TGGTCATGTG
GCTCTGGGTG TATTCTCACT TCTCCTCCCT AAATAGCAAG AAGGAAAAGC CTCTTGGAGC CTCGTGTCTC TGCTTCTTTC
TGTACAATGG TTATGTTTCT GNTCCGCTTA GCTGGTTAAT TATAGAATCA CCCTNGCTGG GGTCTTTTGG GGACTGGCC

SEQ ID NO:1041: (Length of Sequence = 324 Nucleotides)

CCATAAACAG TCCGTCACTG ACAAATGTTG TTACGCAGCA CATTTTATGC AGTGTGTGAC CATACACGAT ACACAGAGGA
AATTCAGGGC TTCTAGGAAA CCTTCTAAGG CCTCATCTCC CTAAGGGCAC CTGATGAGCC ATTCCTCACC CCTGCACTGC
ACCAGGNCTC CAACACCACC ACCAAGGCTA ACCGCTGTGC ACTCTGGGCC CTGGGTCTGC AGTACCTGGC TCCCAAGCAC
ACCAGCATCT GAAAACTTGN CATCCTTGCC GATNITNCGG GGAGTATTGG TTGATTGCAG TGACAAATCG GCAGAAGTTC
CGGG

SEO ID NO:1042: (Length of Sequence = 212 Nucleotides)

ATCTGTTTCT CAGAGATGAC ACTGCCAACA ATCACAGATT TGCATACAAT ACAGTTATGT ATTGGCTATT CACAATTTAC
AGIAGTGTTT TTCCCTCTGA AAAATATAAG TNCAAAAGCT AAGIAAACAA TGNGGTACTG CCATTTGGGN TTTTTTTACAT
GGNCTTAGCT TAAAGAACTG GTCTTTAGCA AATATTCAAC AGNTCAACCT GA

SEO ID NO:1043: (Length of Sequence = 329 Nucleotides)

ACTIGEAGAA AGAAAAATTA GAGAATICCA GATCCITAGA ATGCAGATCA GATCCAGAAT CICCIATCAA AAAAACAAGI TIATCICCIA CITCIAAACI TGGATACTCA TATAGIAGAG ATCIAGACCI TGCIAAGAAA AAACATGCIT CCCIGAGGCA GACGGAGCIA TICCAGATGC TGATAGANCC ACTITAAATC ATGCAGATCA TITCATCAAA ANTAGINCAG CAGCAAGATG AAGAGCGACG TCGGCAGCTG AGAGAGAGAG CICGTCAGCI AATAGCAGAN GCTCGATCTG GAGINAAGAT NICAGAACIT CCCAGCTAT

SEO ID NO:1044: (Length of Sequence = 285 Nucleotides)

GITCHAGCIG TITTNATITC ACACCCTICT GITTHAAAAC ATAGGGACIG ACAGGGAGAC CCAGGGCTGC AATCIGGGIG GIGCHACAIT TGTAGACAAG GACAACTIGC TGIATITHAA CCCAGAAACA THAGAAAGIT TGICCTIGAA CITCIGGCIC AGAITHAGAT GCATCITIGA AGIGCIGATA TTIGGCITAT CIGAAGCTTT GGGATIATCA THINCTAGIT ATGAAGGGAA TGAAAGIGIT CATAACATIT TIGCAGGIGG AAGGIAAAGT TGITG

SEO ID NO:1045: (Length of Sequence = 317 Nucleotides)

TOGGITACIG TAGTATIGIA GIATAGITTG AAGICAGCIA GIGIGATGCC TCCAGCITTG INCITITTICC TCAGGATTGI
CTTGGCTATA CAAGGICTIC TITGATCCCA TATGAAATIT AAAGIAGITT TINCIAATIC TGTGAAGAAT GICAATGGTA
GITTCATGGG TATAGIATTG AATCIATAAA INATITTIGGG CAGTACGGNC ATTITCATGA TATTGATTCT NCCTATCCAT
GATGATGGAA TCTTTTTCCA TITGTTTGGG NCTTCTCTTA TTTCCTTGAG CAGTGGGTTT GTAGTTCTTG GACAAGA

SEQ ID NO:1046: (Length of Sequence = 316 Nucleotide;)

CCAGGIGCAA TCTCGGCTCA CTGCCGACCTC TGCCTCCGCG TAGIGGGACT CCAGCIGTGC ACCACCCAGI CAGCCCCACG
CCCACCCTGC CAGGCGTGTG CACGGTTCAG CGTCACTTTA CAGATGAGGA AACTNAGTCT TTGGGAAGCT GACAAGGTGC
CTGACACAGG CCAGGGCAGG GNCCACCCTC ATGGGCTGTG CTGCAGCCTC TGCCTCGTGG GTCACGGCAC CCCATCTACG
AGGNGCCCCT CAAGGATGCG CCGTCGAGTN CCCGGGGCCCC TTGGCATGTN CCTGGCAGAG AAGGCAGCTC AGGGT

# SEQ ID NO:1047: (Length of Sequence = 261 Nucleotides)

CTTCCTCAAA CTCGGGTTCC AGCTGGGTCT CAAACTCAGG CTCCAACTGG GTCTCAAACT CGGGCTCCAC CTTGGTCCCA
AACTCGGGCT CCACCTCGGT CCCAAACTCT GTCACCACCT CTTINTAGGT CTCANTCTCC GACTCCTCCC AGCCAGCGGT
GGTTGGCGGT ATNAGGCCCC AGGGCTCTAT GGTAGTGCTC AGGGTGNGTG GCAGGGCAG GGGGCAGCGT GGGAGGCACA
GTGTNGGGGG CCTAGGGTGG T

### SEO ID NO:1048: (Length of Sequence = 390 Nucleotides)

GAGAACAAG AGAATGGAGG CCACATACAA TOGAGTAACA GAAGCTTTGC CTGTAGCTCA AGAACCAAGC CGAGAATCCA
CACCTCCTGA TTCACAGTTC AGTATTTCG GCCACTTTAC TCAAATATTT TTATAAATTA TTTTTAAATC GGCAAAATAT
TTAAATTTCA TCCATTAAAT TTAAATTTCT AGATGCCCTA GTGGCATCCA GAACACATAT TTMGGGGAAA ATATTCTAAT
TTTTTTTAAAC AGAAAAAGCT AGGNNCAGAT GATGCATTAA AAAAGTAGAA CACAGAGCTC TTAATTTAGG AATGATCAAA
ATAGGGTTGA TTCAACTATT ACCTTCTCCT AGGGATTATG GATCAACCCC TAGCAGCAGN CAAAGTCACA

## SEO ID NO:1049: (Length of Sequence = 335 Nucleotides)

### SEO ID NO:1050: (Length of Sequence = 265 Nucleotides)

AAAGGGAGGG AGGGAGGGAT GTGGAAAATA TGCAAGATAA ATTAAATNCT TAGTTAAAAA AAAAAAAAG TTTCACCAAC
TGINCTCCAT TACTGAGAAG CCCCCACACT GCCCCACTGT GCATATTCCT AGTATTTCAT CCATGTCCTG CTCTGCTGTG
CTGCCCTACA AAAAANCCCT CCCGGGGGG AAAAAAAANC AAAAAANCG TGTAGTGTGA ACTGCTGAAG AACTTAAATG
TTCAAGAGCA TCTTTAAAGT CTAGG

# SEQ ID NO:1051: (Length of Sequence = 298 Nucleotides)

ATTICTAAAA TECTICTAAA TACTAATATT ATACATTCTC CCATTTATCC TCAAAAAACC CATGAGACTG GTGATGTAAT
TNCTGTGTTC ATTICACAGC TGTGGCAGTC AGTCTAAAGA CCAAGTGATT TGCTCAAAGT CATGGAACAC TTAAATGGCA
GAGCTAAGGC TTAAACCCAG AATTTAAAAA TTTTTTTTNAG CTTCINGTTT TINCCATTAT ACCAGTTTGG CCCTTCATTT
TATTCATGGG TTAAATTAAA TTATGGTAAC AAAGGGCCCC TGGTCACTTT GGACATTT

### SEO ID NO:1052: (Length of Sequence = 359 Nucleotides)

AAGGCAAACG TGGTACATCA TGACACCATG GGAATGACTC ATGCCAGCCA TAAAAAGAAT GAGAATTCTG TCCAGAATTG GTTCCTTCCG GTGGGTTCTT GGTCTCGCTG ACTTCAAAAA TGAAAGCCAT GAACCCTCGT GGTGAGTGTT AACAGTTCCT TCAAAGATGG TGTGTCCGGA GTTTNTTCCC TINCAGAATG TTCCAAATGT TATCCCAAGT TTCTTCCCTT CTGGTGGGTT CGIGGICITG CCIGATINIC AGGAGIGGGA GCCGCAGAAC CTITGCCTGI GAAGIGITAA CAGNNICITI AAAAGGIGGG TGCCATCIGG GAGITTGITC CATTICCICC CCAGIGGGG

SEO ID NO:1053: (Length of Sequence = 195 Nucleotides)

GITGCAAATT TGTATTCCCA GTGTTGGCAG GTGGGGTCCC AATGGGAGCT ATTTAGGTCA TGNAAGGTGG ATCCCTCATG
AAATAGATTA ATGGCCCTCC CTTCCAGGGT AAGTGNAATT NCTCACNCTG TTAAGTTCCC ACTGCAAGAA GGTGGTTGAC
CAAAAAGAAG CCNCGTGCCT CCCCCTAACC CTTGA

SEQ ID NO:1054: (Length of Sequence = 319 Nucleotides)

ACAAAACCAG ATGTTCTCAC AAGAGCCCCT GCTTGCAGAT CACTTACATA GTTTTTGGGG AAGCCAAGAT CGAAGATTTA
TCCCAGCAAG TCACAACTAG CAGCTGCTGC AGAAATTCAA AGTTCAAGGT GCAAGCTGTC TCAAACATTG CAAGCAAAAC
ACACAGTACT TCCAACTGTT ACAAGAGGGAG GAGTGCAAGA GGAAGAGGTT CGCTGAAACA GGTGTTAGTA AGTTNAAGGT
ACATAGANTT GGTTCATGTT CACAAGCAAA TGTGTTCGAG GGNCAAAGGN CAGTTCCGAG CCCTGTAAGT AACAACAGT

SEQ ID NO:1055: (Length of Sequence = 205 Nucleotides)

AACTCAAATA GGAGCTAAAA AAAAAAAAAA GAATCAATGA AACAAAAAAT TAATTTTTIG AAAAACTAAA ATTGATAGCA CTAGCTAGAC TAACCAGCAA AAAAAGNTAG CAAGTACCTA AATGAAAANC TCNAAATGNA AAAAGGAGGA CATTTACAAA TNAACACAGG AAATACAAAA GTTCCATGCA GCGAACTTAT TCACG

SEQ ID NO:1056: (Length of Sequence = 165 Nucleotides)

TGCAAATTAA TGATTTCTGC TICACCAGAT TGGTAGAATG TATAAGATGG TGCATGGGGA AGCATTTAAT ACCCAACAAT ATCTGATTAC ATTGAAATCA CAATGGCCTC CCTATCAAAT VAGTAGCGTT ACTGTTTGAG CCTGVAAAAC TTTGAAAATA ACTTG

SEO ID NO:1057: (Length of Sequence = 203 Nucleotides)

CTITICATICA AAACCCATCA CAGAAATGGA CAGCITGGGT CTGTAACAAA GCATTCATGT TITIAGAGCAT AGGTCAGTAA TIGIATATGA GAGCATACAC TGGCTACATA CAAATTAACT GTTCAGNNCC ACAACTITIN CAATGITTAA AACAGGATNA AGCCTTCCCT GTGAAAAGCA GCACCTITGT GAACGGTTCT TTG

SEQ ID NO:1058: (Length of Sequence = 201 Nucleotides)

AGTGCAATAT GCACATTACT AAGCACAAAA AACAAGTGTA ATTCAGAACT ACTTGCATT TTTTTAGTTA AATGCCAATG AATTATTATG CCTTAGTTTT ATGAACCTGN CINCICCTTG TGCAATTCCT TCCTTGCAAA TGAATTGACT TNAACGCCGT NAGTGAATAG CCTCAGNCTG TAGGATGTCC TTTCAAATTT T

SEO ID NO:1059: (Length of Sequence = 176 Nucleotides)

CCACACTGGC TACATACATG TITTCCAAAT TAAGITTICT GATGGCTCAT CATTIGCCAT CTCTTCAAAT CCAGGICCTT
TTAAAAATCT ATGACCTTGG AATGAATGIG CCAGAATACC TGTATCCTGG AAGICCATGC GAATNITGGC NTCGACTGCC
ATCCGCCATC TGCTGG

SEO ID NO:1060: (Length of Sequence = 277 Nucleotides)

GTCAGAAGCA GITGTACAGT ATTACAGTCA GCCACAGAAG CTGTGTTGGG GGACAAGACC CAATCCTTCC CCACACCAGG CAAAGCAGTA TIGGACATGA GITGGCATGT GGCTGGGCCC ACGTCCTTAT CCCCCAGGNC CTGNGGGGAG ACCACCTTTC

TGAATGGTTA ACCAACCCCT AGGCTACCAC TCTGTATTTC ATCAGGGGTA GGGGTATTAA ACCCCACATG CAAGTAAGGA ACCCTTGCCC CCAGTGTGCA AATGGGATGG GGATGCT

SEO ID NO:1061: (Length of Sequence = 206 Nucleotides)

AGAAAGTAAG ATTCTCAGGG CAACAGTGTA CAGCAGAGTG GTTGCTCCAC AGACAGAGGA GGGCAGAGTG GCCCAGAGTA
TCAGCGTACA GCAAAGTGGG TGTTCCCATC CACAGGGGCA GCGCTATCTC ATAGGANAGA ACAACCCCTA GGAAGGCAAG
CGTCAGNCAG NCAGCAGTGN AACAGTCAAC AGTTAGCCAG TGTCAG

SEO ID NO:1062: (Length of Sequence = 316 Nucleotides)

TINCCCICAC AGAGITITAG TIAGAATCAC TITCICIATI TCCACAAATC CITCITITCT TICCTITIAT TITCIAAAGI
GAATGICCAA GCAAAAAGGA AGCAAAAATG GICAAAGATC TCTCTIACAA TATAGIAATA AATITATNCA AACAACITGG
AATICACCCT GIGCATIGAA AATNCAACIC CACACIGCAA ATTATGGCAT TITTICCCNC TCAAAGGAAT TAGIGAACIC
CATTGGATGC ATTCATACIN CIGITTAGGN AATAAGGGAA ACCGCTITGT AAAAGINCAA CATGGCCTAG GAGITA

SEO ID NO:1063: (Length of Sequence = 314 Nucleotides)

ATGATCIGGT TIATGCTTCA GAAGAAGCAT AGTAGCTTCT ACAGAAAATA AATGATAGAA GGCAAAAGAG AAACATGGCG
AGTATTCCAC TCCAGTGTCT AGTCAAGAGA TTACAAGGGC CTTGGCATGA GGACAACAGT AGAAATNGTT AAAAGTGTAC
TGGATTGCAA AATATTACTT TTGGGCCAGG GCGCCGGGG ...ACACGCCT ATTAATACCC AGCACTTINT GGAGGTGCAG
GGAGTINCGA GTACCAGTCC TGGGCCAACA CGCNTGGAAA TCCTGTTGAA AAATATAAAA ATTAGCCGGG CCGT

SEQ ID NO:1064: (Length c: Sequence = 322 Nucleotides)

GAAACCATTI GAACTAAGIN TGTAAAAATG GCAGATAATA ATTAACACTI GGTAGCAAGA AACGCTITCI GAAATACTGG
GAACACTGAC TIGITTCACT GTAACTTATC ACCTAGTGCT GTATCTGCCA TAGTGCTCAC AATTGCAACT TTATATCCAA
CATGGGTGTT CCATTTCTAT TIGGATAAAA TTTACTGGAA ATATACTAGC AANGAAAAAC TGGTCTTAAA ATGGCAAAAG
GCTCTGGCAC TAAATTCACT GCTACTTAAC TTAGTTTACT AATTAACTTC CTTAATTATA GTTTTCCAAA TCCGCATGCA
CG

SEO ID NO:1065: (Length of Sequence = 297 Nucleotides)

CCCTENCAAC TCCTTECATE GACTGATECT GGAAACTEGE TCAGGGAGCT CCAGGAGGAA CCAGACAGGN TCCTGTTAGC
AGGCTCACCA CAAGTTCTAA AGGGCACCAG CCTTGAGAAG GGCAGTTGGG ATGTGGCCAA ATGTGAAGCC AGGTTINCTG
GGATCCTGAC TGTCCCAGGT TACAAGTTCC TGGCCACTCT GTGAACCTTG GGCAAGTTAA CTTCCAACCT CTTTACAAGT
TCCCTAATCT ATNAGGAAAC ANITAGTNAC ATGACCTTCA TGGGAATTTA TTTATGA

SEQ ID NO:1066: (Length of Sequence = 267 Nucleotides)

ACAATGGGAC TGTCAGAGCA GCCAGCTCCT CCCTGACTGC TCCACAGGAA GAGCCATCAA CAAAGCCAAT CCCTGGAGAT AGGCTCTGAA ACCAGGATAG AGACTCCTTC AATGGCTGCT GWTGGTTCCA CCATGTATCA TCCAGAGNAA TCACCCTGNG TGGGCATAGG TGGGCCTGGG AATCTAGGGC ACAGCAATTC CACCACATCTT CACCTAGAAA CCCTCCTTCT GGGTGGGCCT GCATGGTTTC ATGCCTGTAA ATCCCAG

SEQ ID NO: 1067: (Length of Sequence = 220 Nucleotides)

AAAATGCAAT TGGTTTGTTA CTGAGTACTA TTCGTGGGAA GACAGCATCC TGNACTCCCT CTCTACAGAA TATTGGGAGT AAAAATGAAT GTCATCCCCG GTGGGAAATA TTATTGGGGG TTGGAAGCAC AGAGCACAGG AAAAATTAAG TNCAGGAAAC WO 93/16178 PCT/US93/01294

281

#### AGACACTAAG AGTGCACTGG GCAGGTCTGA CTGCAGGTGA TGCAACTTGC CAGCCGTGGT

SEO ID NO:1068: (Length of Sequence = 412 Nucleotides)
TGGCCAGCAT CTGGGAACIT TGGGTTGTTG GACCAACITC TTCCAACACG TGCGCACTGA TGGCCGGGC CCCAGCCAGG
CCTGNCTGGA AGGGTCTTCC CCGNCCCGAG GGACTGTAGG GGGTCTCTAG GAAGCATCAC ATCAAGGTCC TCAGGTTAGA
TNCAGGNCAG CCCATTGACC CATTINAGGG GACAGCTGGA GGGAAGCCCG GAGTCCCTTG TTTCTTCAGC TGAG

TOGCTCATGA AGATAATTIA ATGCTAGACT GATTICTGCA GAGTAAAATC TGGCATGINC TTCAGGAAGT TTTCTTTGTC
GCTGCATATG AAACATTAGG TCTCCTCCAT TTACATACTC TATAACAAAG AACAATCTGC TTTCTGTCTG AAAGCAAGAA
TGCAGCCTAA CAAGGAAAGG ATGATTGGAT GCCTGCTCAA ACACATGCTT CTCTGTCTGT ACCCAATCAA TATCCTCATC
ATCATTAACA AGCTCTTTTT TCACAACTTT CATTGCATAA ATACGATCTG TTTTTTTTTAA TCGAACCAAC AGTACTTTGG
CATAACTTCC TCTTCCTATT ACCCGGAGCA AATCAAAATC CTGAAGACCT AGACTGGATG AAGCTTTGCA CTTTCCCTGG
NGTCATTGCC TC

SEO ID NO:1070: (Length of Sequence = 358 Nucleotides)

234

SEQ ID NO:1071: (Length of Sequence = 411 Nucleotides)

CTATTTATEA ATTCTCGCAT TGGTTTCGAA AACTCAACAC AGTTAAATGA ACAGGAATTG AAGGTGCATG ATGGATGCGT
CCCTCATAGC ATTTAAATCT CTTCCACTTG ATTAAAAATT CCTAGTTCCT CTTCACTGAA TTGTTTAGAG TTTTTNAGCA
GCCTCTGCCC TGATTAAAAC AAATTAGCAT CAAAGATCCC CTGTTGAATG AGAAATCATT AATTGAGAAA CATGCAATGC
TCCTTAATTA CTTTTAGAAC AGTGAGAGAA CAAATAATCT CAGGTTCCAG AGGCCCTGC CTGCTCTGCA CCGTGAACTC
ATTTCGTGTA GCTGCTGGAA TAAAACTCAA GTAGGCAAAC ACTATTTGGG GAATATCAAT GCAAGCTTTC AGTAAACACA
CTGTTAGGATT G

SEO ID NO:1072: (Length of Sequence = 342 Nucleotides)

TOCCATTITI ATAATTATIG GAACATGAAA CIGIATITCI AIGAACICAA TGATITITITI CCATAAAATI ATAIGCIAAG AGAGICACCA CAAAACTAIG AATICICICC CGAATTATIT TIGCITCITI GGAGCACCAT AGICITIGIT CAAATCACAA CATGAAACTG TIGCIGCAAT GCIAAAGAIG TGAATCCACC ACTATCAATA CGGICAGGGI AAAACCTGGA GCCACATGIT ATICAAGITA TITITGITAT CIAATGATIG ACATGAAAAT AAAATAGIAA GCCAATATTA AATITGIAGG CATAGITGCC CCACCINAAA AGIGITIACA AA

SEQ ID NO:1073: (Length of Sequence = 217 Nucleotides)

GTTTTCTGTC CTGGCTAGGA TAATGCAAGC NCTTTTCAGA TGANTCAGAA TCGAAGAAAA TACGCTGGTA AAACAGGACC
TGATTTACCA GGNACTAAAC AATTACACTC CCATTTCCAT TGCTTTCAAT ATTTTCACAC GNTACACGAA CCTTTAAGAT
GGAAAGGGAA AGCGATTTTT TNTTCAACAA GTGGGCCACC AGATGAACCA AATTAGA

SEQ ID NO:1074: (Length of Sequence = 379 Nucleotides)

GITTAAAATT TCATCGGAAT GTATAAGCIT ATTTATTAGT GTATTTAATG GTTCATCAAT TGATAAAACA GGTGTAGCAA
ATACATGCCT TCCITTTGGG GGATGGGCCT GGTTAATCTC CAAATTGGCC GTTTGGAACA ACTCATCATT ACTGTACAAA
GAAGGTACCA CTTGGTGGGA ACTTTCACTT TTTAACAAAA CTGGTTCATA TTTCTCACTT GCATAGGAAA TGGTCAAACC
TTGAAGTGAA GCAGAGTGCA TATGAGAAGT AGGCGACACA TCAAAAACTG GTACAGATGT AGAGTGCAGC ATGTTTTCAC
TTGAAGCAGA ATTTGATACA ATGAGGATGC AACCATTGTA GANCTAAATT TATCAACTT

SEO ID NO:1075: (Length of Sequence = 345 Nucleotides)

ATTAAGITGA CAGTCCAATC AGAAATATIT AAACAAAGIT TCACTACITA AACACCATCI AAATATACIT TITIGITATAT
TCCCAGCAGA AATTGATGGC AAGGAATCAT ATATCCCATC AAAACCGTAT TITITCCCCCT AAAAGGCAGI TTAGATGINC
TCATTCTAGG NITTCCATCI CTCTCCCCCA CCATTCCAAT TCCCAGAGTA CCTCTACAAA TATCCCIGCT TACCAGTAGA
NCTATTTGCT TTAACAATCI TTCTGTGGGT AAGGAGATGC ATATGCCAAT GTGAAAACTA TGGAGGGGGA CTCCTGCCTT
CAAAGGCTGA CTAGAAACCA TTGGA

SEQ ID NO:1076: (Length of Sequence = 286 Nucleotides)

TTTTTTTTGA GATGGAGTCT CGCTCTGING CCCAGTGTGG AGTGCAGTGG CATGATCTCG GCTCACTGCA AGCNCCGCCT CCTGGGTTCA TGCCATTNTC CTGCCTCACC CTCCCGAGTA GCTTGGACTA CAGGCGCCTG CNACCACGCC CAGCTAATTT MTINTGTGTG TGTTTTTGGC AGAGACAGGG TTTCACCATG TTGGCCAGAA TGGTCTCTAT CTCCTGACCT CGTGATCCAC CCGCCTTGGC CTCCCAAGGT GGTGGGATTA CAGGCGTAAA TMACCG

SEQ ID NO:1077: (Length of Sequence = 366 Nucleotides)

TCACATAGGI CACATTITAC CCATGAAACC TITCTAAATT ACCTITIGCA TITNI'IGCCI ATCCTICTAC ATCATCATAC
TTCGTCAATT AAAGTCACTT TITTGGGTAA CATTTCAGAA ATTGGGATTC CTCTTACAAT TGCTATCAGA CAGAAGCCAA
TTATGATGIT GTCATTGCTT ACACATGGGA AAATAACAAA ACTGCCAGCA TGACATTTGC ATATGACAGT CAACAGCCTG
AAAGAAATTC CCAGAAATGA TACTGGAGCA TTCATTTCAC CCTCTAGGAA CCAAATGGAC TAGGAAGGAA GTAGAAGATG
GGGAATCCCT AAGCAGCAGT CAAAGTAGGC TGGCTTTTCA TAATTT

SEQ ID NO:1078: (Length of Sequence = 380 Nucleotides)

GTITIAAGTGC GAAGATTITA TTAGGCGGTA CAATTCCAAG GTGGTAAGGG TGAAAGGAAA GGCGAAGGCA GGCAAATACA
TTATTGAGCT GAAAACAACT TTACATTCAA GGACAGCTTC CAGACAAGCC ATGTAGAACC AGCATGCCTT GGGACTGTNT
GGATGGCAGG GAGACGAGTT TCTATGCTGA CCACTTCATG CTTTCTSCCC CCTTTGGGGA AAGTATGCCT CACGGACCTC
TAACTCTCCC ACTTCTTGG GGGCAGCACC TGACCCCTCC CGGCAACTNC TAGGCAAGAG CATTCTGTTC CTTCAAATTT
YTCACCTGAG TCTGAGTCAG AGCATYCCAT CATCAGAGCC TCTGTCAAGG AGGCAGTGCT

SEO ID NO:1079: (Length of Sequence = 439 Nucleotides)

CTTAAGTTAC TGAAATTGAA ACACCCTTTG TCCTTCTCGG CGGGGCTTC CTGGTCTGIN CTTTACTTGG CTTTTTTCCT
TCCCGTCTTA GCCTCACCCC CTTGTCAACC AGATTGAGTT GCTATAGCTT GATGCAGGGA CCCAGTGAAG TTTCTCCGTT
AAAGATTGGG AGTCGTCGAA ATGTTTAGAT TCTTTTTAGGA AAGGAATTAT TTTCCCCCCT TTTACAGGGT AGTAACTTCT
CCACAGAAGT GCCAATATGG CAAAATTACA CAAGAAAACA GTATTGCAAT GNCACCATTA CATAAGGAAC ATTGAACTGT
TAGAGGAGTG CTCTTCCAAA CAAAACAAAA ATGTCTCTAG GTTTAGTCAG AGCTTTCACA AGGTAATAAC CTTTCTGTAT
TNAAATCAGG GTAACCCCTT TCTGTATTTG AGTGCAGTG

SEO ID NO:1080: (Length of Sequence = 419 Nucleotides)

CTGAACTCCC TGAAAATAGG AAGTCTCAAT TAAAAAATCA ATTTGTCATA GTCCACATAA AGATAATCAA TACATTTTGC
TCTCAGTCCT TGGGATGGTT TTTGTAAATA ATATTATCTT GACAAAAACA AACAGGAAGA TCCCACCCCC AACACATACC
ACATTCCAAT GTTACCTGGN ATTAAAATAT ATACCAACAT GCATCTTTAG GTTACTCTGG TCCATGGTTT CCTCCAGTGG
CAATGGAATT TACAAAAATG TAAGACGTAA TAGATATATA ATTATCTTTT TNCCTAAATG AAACTAGCCT TAAAAACTGG
TACATAATGG TTCCTGGGTT CANTGATCAA AATTATGGAN GTACACTTAA CCTATCTTCC ATTGAGTGGC TTTAAATGGG
ACCTTAAACT GTGGACTCC

SEQ ID NO:1081: (Length of Sequence = 411 Nucleotides)

CAGCITTAN ACCANAGECE CACTANACCT CETANAGECA TEANCAGATT TANAGAGANA GANAACTCTE AGTGTGCCTT
TAGGGTCTTA CITCCTAGTG ACCCTGTGCA GGAGGGGGCG GATGAGTTTC CAGAGCATAG AACTCCTTCA GCAAGCATAC
TTGAGGAACC ACTGACAGAG CAAAATCATG CTGACTGCTT AGATTCAGCT GGGCCACGGT TANACGTTTG TNATANATCC
AGTGCCAGCA TTGGTGACAT GGAANAGGAG CCAGGAATTC CCAGTTTGAC ACCACAGGCT GAGCTCCCTG AACCACGTGT
GCGGTCAGAG AAGAAACGCC TTAGGNAGCC AAGCAAAGTG GCTTTTGGAA TATACAGAAG AATATGATCA GATATTTGCT
CCCTAAGGAA A

SEO ID NO:1082: (Length of Sequence = 350 Nucleotides)

CTGTGAGGGC ACAAGTGTAG GTATCTTTIC AAGTTCTCTA GGTGATTCTA GAATGCAGCA GGGTTGAGAT GCTCTGCCTT
AGGGGTAGAG AGGTGGGAAC ACTGACAGGT TCTGCAAAAC ATCTCTGAAC AGCTGCTGGT GTCTTTTTCT GTACTTCAAG
TTTCACGGCA CATCTGATAG CTGINCCGAA AGGGAAGAGA GAATTACGTG GGCTAGGCTG GTTTGAAGGT TTGCNTAAGN
TTTGGCTTGA GCGACTTTAA CACGTTTATT TCAAAGTAAT TTGTGTTTGT AGCCCCACTA AAGTAATTTT GGGCCAGNAA
AGGTTCAAAA TACGGTTTTC CCTACTTAAG

SEO ID NO:1083: (Length of Sequence = 430 Nucleotides)

GIGAAGTCCA CCIGCTTATE GACAGCCCAT TTGCATGGGG CCCTGCGTGT GGTGCAGCCC AGGGTATGIN AGGAAGGCCT CANAGGAGCT GCTGCTGCCA CAGGTGGTCA CCAGGGCAGA GGTTACACTG ACATACCTCC AGACCAGCCC GCTCCACTGT GGACCAGGGCC AAGTNACATA CCTGCTGTTT ACCATGGGGT CACGGCAGAA CCTGTNTCAC GGGGTGCTTT GTGATGCCAA ATGGATATAG GTGGGACGG CTGGCAGCAG CCGCCTCAGC GTCCAGCCAG CTGCCCTCCC GTTCTGCTCC GGCCTGCCTG TGGGCCTAAT GGTGGCACCG TTTAAGCANC TGCTGTGTGC TCAGCCTGGG GGNCTGAGGG TTTCCATACA TGATCACTGG TTCCTACCCA AGGCCTTAAT TCCTNCCTGT

SEQ ID NO:1084: (Length of Sequence = 369 Nucleotides)

AATGGAAGAA GTGAAAAAGA ACAACACAAA GAAAATAAAG AAGTAACCTC TTTCACCCAC TGAAATAATC TCTGGAAAAGA ATATTAGCAA TCATGCAGCT TATAAAATATC TAAAGGGCTA GAATTGAGGA ATTTATAAGA NIAANTTTT TTTTCAACAC ATAAAAATACA ACATGGGAAA TAAGATGTTT TTTACTAACA GGCAAACACT TGAGGGGTCC TCTTCAAAGA CTACAGTGGA TGAAAGACCA GTTATCCAAA GGAAACGGTT AGTAGAAATA TAAAGTTAGT CCCACACAAA ATTAAAATGG TGCTCAATGC AGATTATCTA TCATTANACC ATTTTTAAAG GCAATTTNTT ATTTAAAAT

SEQ ID NO:1085: (Length of Sequence = 413 Nucleotides)

ATACCITINA GCIGGCATAA TITAACGITC TAATTATCCC TITAATCATAA GCIGTACGAT TCIATAATTA AAAAGITAAT GCCITCITAA TGICTATNCI AGTAGAAGAA TGATGAGAAA ATAATAGTAT AGATTAGTIT TGGICTCTAC TCATTITGCC TTCIGATTAT ATTACAACTC CAGCIGGIGA CAAGATGGCT GTGTAAATCT TGAAATCACT GAGCATTCAT TTTAGCITCT CATTGAAAGG TAGATATTCA GTATGAATIG TAAACTGGCA TTAAGGGAGA AAGTAGCAAA AATCAAACTT GATCTGAGAA TTACTTGCTG GTGCATTTCC TCAATGCATA GTAATATCCT TATGANGATG CAGATGCAAA AGTGGGTTTT GGAGGTGGAT AAGGAGGGCA GCT

## SEQ ID NO:1086: (Length of Sequence = 277 Nucleotides)

#### SEO ID NO:1087: (Length of Sequence = 360 Nucleotides)

TTTTTTTTT TTTTTTGAG ACATGCCC ACTGCGCCC CCAGGCGGA GTGCAGTGGT GCAATCTTGG CTCACTGCAA
CCTCTAAATC CCAGGTCAA GCGATCCTCT CACCTCAGCC TCCGGAGGGC NTGGGATTAC AGGTGTGAGC CACCGCGCCC
GGCAGCATTA TTTTTTAAAG ATCTGTGATA GTGCATGTTG TGCTAGTTCT TTAATACAGA CTATATTGTA TTCCATGTCA
GTTTTTAAAG TTTATTTCCC TATTGATGGC ATTTAATTCC AACTTTTAGA TAAAAGGATG TACTGGACAT TTTTATAATT
TTTTTGGGGG ACCATGTAAG AGTTTTTCTA GGGGGAATTC

### SEO ID NO:1088: (Length of Sequence = 209 Nucleotides)

CTGGGACCAG CTGGAACAGA AGTGGTAAAG GATAACTAGC TACCTGCACC GCCAGAGATC AGGNTCAGGG TGAAGCTGGT TTCCCAGCAG GCGAAGTGAA GGAAAGTGGT TNGAAAGGAA GAGGAGGAGC AGGAGATGGT AGGTCCCTCG CCINTCTCCC MINCTACCCT GGAALNATAA GTGTCAGGTT CATACTTAAC CACCCCCTT

### SEO ID NO:1089: (Length of Sequence = 409 Nucleotides)

TITTGCTCAC AGCTACATCT TCAGAGGTGA GAACCATGCA TGACACAGAG AAGATGCTCA CTGATGGATT TAATGAGTCA
AACATTGAAG AATCAATGAG TGCCGGAAAT AAACAGGATA GGTGGCAGCA TAGCATGCCC TTAAGANCAT GGCTGTGGAT
TCAAATCCCA GACCAATCAC TGANITTCAA GCCACTITGC CTCTCTGAGC CTCTGTTTTC TCATCTGTCA AGTGGCAATA
ACAATAAATG GTACGTGCCT CATAGGGGCA CCTTGAGGAT TAAAAGAGAG GGTTTCAATA AATCAAGTAC TGATTTCAAA
ACCTGGCACCA TAGTAGGCCAC TCAGCACATG GNCCTTATAT ACTINTGGGC CAGCAGCGGC TGGGGCTCAT CCCTCCCTGG
CTGGGTCCCA

### SEO ID NO:1090: (Length of Sequence = 337 Nucleotides)

GAACCINTCC CCATTGGAGA GGATGAGGAT GATGATCTGG ACCAGGAGAC ATTCAGCATA TGTAAGGAGA GGATGAGGCC
CGINAAAAAG GCACTGAAAC AGCTCGACAA ACCTGACAAG GGGCTCAACG TGCAAGANCA GCTGGAACAC ACCCGGAACT
GCCTGCTGAA AATCGGAGAC CGGATAGCCG AGTGCCTTAA AGCCTACTCA GATCAGGAGC ACATCAAACT CTGGAGGAGG
AACCTATGGA TTTTTGTTTC CAAGTTTACA GAATTTAATG CTCGAAAACT GCATAAGTTA TNCAAGATGG CTCATAAGNA
AAGGTCTCAA GAAGAAG

### SEO ID NO:1091: (Length of Sequence = 411 Nucleotides)

CCACTACCAC AGGAAATCTC TATACCCTTC TTGGCTTTTC CTTTTAATGT AATTITTCTTA AAAGCTTCAA GATAATTTTT
AATCAGGCAT GCTGAAATCT ATCTAACCTA TTAGTCACTA ATTATATTCT TCAAGCCTAT ATATTAATGT TTCTNCTGTT
GTAAATTCAT GATCATAAAG TTTTGGACCT GGCCATCAAT ACTAAAGCAC TGATATTTAG TTTTAGGTGA TACTTGGGCA

TAAATACAAA CACGGGATAT ATTINGTCAT AGAAAAAAAT GIGTTACIGC ATTATTITGC ACTICTGAAG GACTGCAAAC ATTITTCAAG CACAATAAGC AAATTCTTCT TTCAAAAAGG NATACTTING CACATATGIN AGGITTGGAA AATGACTAGG NCCCTAGGGA G

#### SEO ID NO:1092: (Length of Sequence = 349 Nucleotides)

AAAGAAAATG CCTTGGGAAG ACAGATGCAT TTTINCCCAC TGGTGTTGCA ATTGCTCAAA TATTTINAGG ATGAATATCC
TCACCTTGGA GGCAAGTTTT TAAGAGTGAA TTTGAATTAC TGGAGCAGTG AACAATTATT TAGAGTCTGG TATAAGTGAA
GAAAAGAATC ATGACCNGTA AGCTGTCTTG NAGGTACCAG CAAACTGNCT CTAAAATTTA TATGGAAAGG CAAAGGGGTT
AGAATAGCCA ACATAATACT GNAGAAGTTG GAAGACTCAC ACTATCCAAT TTCAAGGTTT ACTGTAAAGC TACAGTAACC
AAGGCAATGT GGCACTGGTG AAAAAGTAA

#### SEQ ID NO:1093: (Length of Sequence = 400 Nucleotides)

GGACCTIGIT TIACATICIG GATTITCCTT TITACTITIC TAATGATGIA ATTTAACINC TICCIGIATI TNCCATATIT
CCITATAAAAT GGIAGTIAGA TCITAAAAGCT TGATTIACIT ATTTCAGATT TCITAGTCAAG GGIACTCAAT AGATTGIATI
TCCITTIGCC TCACACGGAG GIGCATAATG TCIGCCTGGC CTGTAGTGAT GCTTAAGGITG ATCATTCTGT TCAGGIGGCA
TCAGGICTGTG ATAACTICCT GTAAGAATCG TTCATTAACC TTTCATCTAA TGGNTCCATT CATTCATGAT CTTTAACTGA
ATCCCTGTTA TTTCATTAGG GAATAGCAAA ATAATGATTT TCTAATTCTG TNATTCCTTT CACATTTATT AACTGTAATT

### SEO ID NO:1094: (Length of Sequence = 414 Nucleotides)

GICAGINITC CATAACIGIT TOCIGCIGAC AAAGGGGCAG TGGIGATGGT TCTINGGGTC TIGGCCTCTT GCTAGCIGIC ACAGCAGGAG GGIGGCTTIN TGGATIGGTG AAAGGGGTAT CCAGCCAGGT CCAAGAGAGA CAGGGGCAGG GITTINCCAA TGCCAAATAT ACTICAGCAG TAGAAGCCAC AAGATIACAT TATTAAATIG TCCCAAGAGT CCCCCAGTGC AAACCCCAGC TGAACGCCAT TTAGTTATATAT NCTGGTGCGT TTTCCTTCTG CAGGAACTCA AACCAAGGTT TCTTATGTGT GCTTGAGTTG GGGGCCAGAG TGACAACTGG TAGAAAACTA TGTTATTCCC CAGCTANGAG AACAGAGGGG AGGGGTACAT GATAGTAGGG AGTCAAGTTT ACAA

#### SEO ID NO:1095: (Length of Sequence = 387 Nucleotides)

GATCIGGCAA CCAATTATGI AAATAGICAT ATGAATCCIT CAGAATGGAT AACACAGCIT INCIGACIGG IGIGAAATAG
ITITICAGGIG CICATTCITT ACTICATTAG CITATCITAT ATCATTAGCI TATCCICCAT ICAGGIATAA CAGATCITIT
ITITICIGATA AATATGGCAG ITIAGGGAAA TAAACIATGG CATAATATGC TAGGCCATIC ITCIAGGCCA CGCITCITIG
ATTGIAACCI TAAACCCITT ATCAGAACCI AAACAACTIT ICAAAAGATC TATACATATT INNATCCAAT GITTAAGGCI
ATGAGIAATT CATTATGGIC ACICITCATT ITINICACCI GATAATGATC ICCNCAAAAA IGITGAG

#### SEO ID NO:1096: (Length of Sequence = 416 Nucleotides)

AACTTAAAGC TITAGAATGA TIGAGGTAGC TCAGAGCAAA AACCAAAAGG AAAGGTGATA TGTAGATGTC TGGGCACTCA
CATCATAGGT TIGGATAGCT AGTITAGGAG TAAGTGAAAC ATTITAGAAG AGCATTTATG TITACCTTGA CAATAGGATG
GGAGATTCTT AACCCCCCTT GIAATATGCA CCGATTGATT CINAGTTAAA ATACACCACA GTGACAGTGA TATCATCCCT
GTACATCCTC GCCAAGTCCT CTGGCAATGT CAGCATCGCC GNCAGCCGCT CTGCCTCCAT CTCCCCATAC TCATTGTTCC
CGATGGCATG TCTGATCAGC CGCGTGGCTG CATTTTGGTC AGCCTCGTGG AGCCCGCTGG CTTTCCTCTG CAGCAGCAGG
CTCTGCCAATG AGNCCC

SEO ID NO:1097: (Length of Sequence = 406 Nucleotides)

CTGACCTCGT GATCCGCCCA CCTCGGCCTC CCGAAATGCT GGGATTACAG GCGTGAACCA CTGCGCCCGG CATGATTGGC
ATTTTGGGCT AAATAGTTTC TGTCCACAGG ACCGTCTTGT GCAGTGCAGG TCTTTTAGCA TCCTGGCCAC TCATAGTGCC
CGTGGTTCTC AGTAGAAGCT GTAGAGGATG TTGGGAAATT GGGGTGGGTT GGTCACAGTG CCTGGCATCT GTCTCAGGGT
AAGGGCTTNG GAGGCTCAAG TGCAGAGTCG TATCTGGATG CCAGCAACAC CCTGTTGAGA AACTTTCTAC TATGGTATGC
TCATCATTCT CTGAAGATGT CAGGGCCTGT TTGTTTGTTT GCCTGTTTCT CTCACTTTTG CCTTATAATC AGTTCTTCCT
TGTTGG

SEO ID NO:1098: (Length of Sequence = 326 Nucleotides)

GECCCGCCCC CCTCGGCCTC CCAAAGTGCT GEGATTACAG GCATGAGCCA CCGCGCCCGG CCATGTAACA ACTITTATAA
AGTTATGATG TGATGAGTTT TGGTGTAATG TTTTTCCCTC CTCTACCTAA AACCCTTCAT GCCTTCCCAT TGCTCCTTAGA
AAACACTCCC CAATCTGAAA CATGACCATT TTTCGTTTIN ACACCCAGAT TGCTCCAGAC TTGGTCAGTT GGTGTCCCTC
CAAGCTGGTG CTGGTGTCCT TCCGNCAINC CCCTATTAGT TTTTGAGCAC CTGGACCAGT AAGGTGTTCA GTCTCACTTT
GCACTT

SEO ID NO:1099: (Length of Sequence = 342 Nucleotides)

GAAAACGAAC AAGITICAGC AGICTAGCCI TIGGATGACC TATITIGAAAA CCACTGAAAG TCGIGGAGGA AIGGGCAAGA
ACCACCICAT GATICINCAG GCCATIGCIA ACGAACAGCI CATIGCIACA ACCAGICCAG AGGITITATI CCCTCIACTC
CGAGCAATGA AATAGACCIG AGITATGCIT CCTTTCATTI AATITCIGCA GATAAATAGI TICCIGAGCA AIGGATGCIA
TGCCIGGATA CCAGICICCA CITTGCACGC CGGAACTGCC TIGGGNCCAC AGITACAGAA AAAATGIAAA CTCAGAGIGA
TCCTIGIGTA TATIGCIATA GA

SEO ID NO:1100: (Length of Sequence = 301 Nucleotides)

ATCGCTTGAG CCCAGGAGIT CGAGACCAGC CTGGGCAATG TGACAAAACC CAATCTCTAC AAAAAATACA AAAGANTTAG
TCAGGTATGG TGGCGCATGA CTGCAGTCTC AGCTACTTGG TAGGCTGAGG TAAAAGGNTC ACCTGAGCCC GGGAAGTAGA
GGCACAGTGA GCCATCATTG TGTGCCACTG GACTCCAGCA TAGGGAAGGG GACTGAGACC GTCTCAAAAA AATTAAATAG
AAAGTCTTCT TTTTTTAAAA TNCTGCAATT CATGAGAAAA CTGCACTCAC ACATAGTGTG T

SEO ID NO:1101: (Length of Sequence = 300 Nucleotides)

TTAAGTCAAA GGCTAGAAAT GATTAAACIT AGTGAAGAAG ACATGTCAAA AGCCGAGAGA GGCCAAAAGC TAGGCCTCTT
ATGCCTAACA GTCAGAAATG CAAAAGNAAA ATTATTGAAG GAAATTAAAA GTGAAACAAC CTTATTGCTG ATATGCAGAC
AGTTTTAATA TTCTGGATGG AAGATCAAAC CAGCCACATT TCCTTAAGTC AAAGCCTAAT CCAGAACAAA ATCCTAACTC
TCTTCAATTC TTACGANGCC TGAGAGAGGT AAGGAAGTTG CAGAAAAGTT TTGAACTAGC

SEQ ID NO:1102: (Length of Sequence = 174 Nucleotides)

GAGATCGAGA CCATCCTGGC TAACACGGTG AAACCCCCTC TCTACTAAAA ATCCAAAAAA ATTAGCCGGG CGTTGCGGCT GGCGCTTGTN GTCCCAGNTA CTCCGGAGGC TGAGGCAGGA GAATAGCGTG AACCCTGNGN GGCGGGNTTG CAGTGAGCCC GAGATCGGGC CACT

SEO ID NO:1103: (Length of Sequence = 360 Nucleotides)

ACAAGGICIT GCTATGITGC CCAAGCITGI CTCAAACICC TCGICICAAG CAATCCITCI GCCCIGGCCC TCCCAAAGIT CTGGGTATTA CAGGIGTGAG CCAGCACICC TGGCCCATCA CAGICTTAAA ACCAAAAGIT CTGTGICCGA GGAAAACCAG

SEQ ID NO:1104: (Length of Sequence = 400 Nucleotides)

GGAAGCAAGA CAAAAAAGGA CAGAAAAGCT GGTTTAGGTC TTCAGTATGT TTATTTGTCC CTCACATAGC GGCTTGATCT
GTCTGCCTGT GTGTTCACAT AGTTAACCAG AAACGCTAGG AGGAAGTTGT ACCAGTGGA TACCTCCTTA GGTGCCAAAG
TTTTATTTTG AGAAATAATA TTACTTTCCT CTTCTGAAAT AAAATAATAA TAATAAGANT GAAACCCCCA AACCACAGTG
TGAGTCTCAG GTTAGCATTT GAAAACATCT CCAGAGACAT TGTTATTCCT CAGGAGGTTT CCCTGACTCC TTAAATGTGG
CTGATGTTC ATGGTTAATT TATTTANTTT TAATAAGGTA TGAGCAATCG AAGGGGCTGA TCATCTGAGG TTTTGTACCT

SEQ ID NO:1105: (Length of Sequence = 380 Nucleotides)

CCCAGTGCAG AGGGTGACCA AGCCTGGGAA GGCCCCAGGG GTCCAACACC AAAATTAAAG GTTTATTATA CACAAGAGGA
CGTTCTGTCC CTCANAGTGG CTGGCCACCC TCCCCACTCT GGCCAAGGTC CTGCACAGAG GTTTGTCCTC AAGGGTGACC
CTTCTTGGCC GCCCACAGCT AGACCTCCGG CGGAGAGGCA CGCAGTCCAT GCTGCTGGCA CAAGTCACTT GGNCAGCTNC
TCAGCCACCG NTTTGGCATC TTGTCCTTNA GGTAGGCGCC TTTNTTGCCA TTCAGACTTG AGTTCCAGCC ACTCATAGAA
TGGGACGTCC ACTATCAGGA AGNCTGCAGC CACTTATGTG TCGCCGGGCC AGAACAAAGG

SEQ ID NO:1106: (Length of Sequence = 334 Nucleotides)

TGIATCINIT TGANITCIAA ACCCITGCIT ITCCCACIGC AAATTGITIT GGCTAGAGG CAGGCIATIA AGACAITCIA
GCCAAGCCAA TITCCTGAGA GINCTGCAGG TACCAGGTGI TGCTGGAGCC CAGCATCTGC TCAGAGGAAG GCAGAGAGAC
CCAGAGGAAC CCAGAATGAG ACACTCATIT TIGCATCCIC AGITTCCAAA TIAATTTINI AGCTCCTGGI TAGGACCCGA
NTINCAGAGA CCAGGCAGCI NICCAACAAG AATGCTGACA GGITTCATIG TCCTCTAGGG TAGCTGCTGN CTAAAGAATA
TTTGATTTIT TGGG

<u>SEO ID NO:1107:</u> (Length of Sequence = 346 Nucleotides)

CTCACTTIAG TITGAGICAA TATCIGAGAA AAAAAGAATG GAGIAAAAGC ACAGAAAGCA AAACITAGCI TAGAAAATAT
TICCIAATIC AAAAAATGAA CAAGICAGAT TCIGIAAAGA TATCCAGIGA AATCITGAAG AAATATIGIA TIGATTATTA
ATTAANCIGA TICGAAAAGIG ATCITGGGIT CACAATGAGG TIGITGAACA AGTAGCATIT TCATACAATT GCAAACCAAT
TCAAIGTITI TNCATACACT GITTACATIT CITINCAAAA TITGATTICT TCTTCGIGAT CCTAGICAAA TTCTGCCTTC
TCAGIAAATC TITATCAAGT TIGCAG

SEQ ID NO:1108: (Length of Sequence = 410 Nucleotides)

TCCTGGCGAC GIGGICCCGG TAGGAGACTI AGACCIGAGC TGGATCTGIT GACCCCAAAT TGTGCTITTC CCACCAAGAA
GAAAGACAGG GAGAGAAACA TTAGTACAAG TNCTGAACTA AAATATAGCA GAGAAGAAAC ATAATCTCTG AAATCACACA
GCTATTCGGT TTCAAAGCGT TCCTAGCGCC CAGCTCTCCT AACTCCTGGC CAGTGTTCTT GACATTATGG TAATACATAA
AGACTTTGIT TCCGCTGGTG TGTGTCTGTG GGAAGCCTCT GACTCACCTC CGTGCTCCAG TAGCACCCTG TGCAAGCCTT
CCAATGTCGN CCTTATTGCG TGGCGCGGAA GATAATAGTT TGGATTNCTC TGCAAGTCAG ATAATAGCTG TATCCACTTA
CTTGGCACAT

SEQ ID NO:1109: (Length of Sequence = 352 Nucleotides)

CECTOGINIG TOCCACACAA ATGITTAAGA AGICACTGCA ATGITACTOCC CGGCTCTGAT GAAAAGAAGC CCCTGGCACA
AAAGATTCCA GIGCCCCTGA AGAGGCTCCC TTCCTCCTGT GGGCTCTCCT AGAAAACCAG CGGGACGGCC TCCCTGCTGA
TACCGTCTAT AACCTTAGGG GGCCCTCGGG CAGGCAAACT CATCTCGGTG ATGCCTGTAG ATGCTAACAC TGGCCAATTC
AATGNCACAN CTACTGGTTA CCCCTTTTGA GGGGCATTTC TCCAGACAGA AGGCCCCTTG AAGCCTAGGT AGGCCAGGNT
CAGAGATACA CCCGINITIG TCTCGAAGGC TT

#### SEQ ID NO:1110: (Length of Sequence = 218 Nucleotides)

GITTINITCA TITATINNCI CCCCATAAAA CAGIATGIAC AAGGGITIGA TICAGGGGAG AGAAAGGATA TATGAAGACA CATTCITCCC TCTTCIATTC TCTTACCTGG TIAGAAATAA ATAGGCATAT AGICCNGITT ATTATGGGCA GGAAGGIAGG TAAAGATCAC CTAAGINCIT ATGGCGTGIT GGCTTTGGCA CATGGAGAAT GAGTTTIT

## SEO ID NO:1111: (Length of Sequence = 211 Nucleotides)

TTTGCTTTAT GAAGAACTG GCCTAGGTAG GGTTACAAAT GGGTTTTACT GAACTTAAAC AGCTAATTGC TACATCTCTG
AAAATAATCA GAATAGAAAA ATAGATGGAA AAATTTCAAA CCCACTGTAA GAGACTAACA TAAATCCAAT TCCAAAAGCT
GTTAATCATA CCATCTAAAA AGAAAACTGT CGACTAATCA TGTGTTTACA A

## SEO ID NO:1112: (Length of Sequence = 360 Nucleotides)

CCCTATAATA GICCCGIGAA TAGGGCTAGC AGTGGGATTI TIGTGITATA GGCGAGGAAA TAAACACTCC TITTGCTGAG
ACTAAAGAGC CAGGITGGG TCTCTGGACA CATAGIGCAA TCAAGGGAGG CTTAAGACAG CAGAGGCCCT CAGAGAAGAC
GTTCATTCTC CCAGCTACTT GCTAAGCACG INCCGTGTGA TCTGGGCAGT CCTGGGCACA CCAGTGGTGA AAATACATGG
TCCTGCCTGC CTGCCTGGAG CTTCTATTTT CCTNATGGGA GAATGCTGCT CCATTTTGTT ATTGGAGGAA CTTTTTGCAA
GCAAAGCCIN TTTGGGGAAA AATGGCGGGC TAGAAACCTG

# SEO ID NO:1117: (Length of Sequence = 448 Nucleotides)

GCGGGTACTG CGTTAGTGAT TAGAGTTTTT NCCCTGCCGG AGGTGGGATA CACGGTAGCA TCATGGTCGA GGAGGTACAG
AAACATTCTG TACACACCCT TGTNTTCAGG TCGTTGAAGA GGACCCATGA CATGTTTGTA GCTGATAATG GAAAACCTGT
GCCTTTAGAT GAAGAGAGTC ACAAACGAAA AATGGCAATC AAGCTTCGTA ATGAGTATGG TCCTGTNTTG CATATGCCTA
CTTCAAAAAGA AAATCTTAAA GAGAAGGGTC CTCAGANTGC AACGGGATTC ATATGTTCAT AAACAGTACC CTGCCAATCA
AGGACAAGAA GTTGAATACT TTGTGGCAGG TACACATCCA TACCCACCAG GACCTGGGGT TNNTTTTGAC AGCAGATACT
AAGTTCCNGA GGATGCCCAG TGATCAGNTG CACAGTCCTA GCGGTGGC

# SEO ID NO:1114: (Length of Sequence = 268 Nucleotides)

GECCECCAGE TGGTGCCATG NICTINIGIN CTGTGCGTCG GECGATGTGG TCATCAGCCT GAGACCCAGA TAGGCTGAAC CCCGACTGAT GTAGGTTGCG CACAGGAGGG ACGAGGATCT TGCCTGGGCA GGACGCGCGG GCCGGAGCGC CACTCCCTGG CTTGGCAGGC ACCATCACCT CGTGGACGGG CCCGTNATAC AGCCCACGGG GCACACCGTG GNTTCTNCGN CAGCCTGTTG CGAGCTTTGA TCCTCTTGTA GACAAAGT

# SEO ID NO:1115: (Length of Sequence = 342 Nucleotides)

ATCAGTGCCT TCTTCAGCTC TATCTGGGAC ACCATCTTGA CCAAACACCA AGAAGGCATC TACAACACCA TCTGCCTGGN
AGTCCTCCTG GGCCTGCCAC TCTTGGTGAT CATCACACTC CTCTTCATCT GTTGCCATTG CTGCTGGAGC CCACCAGGCA
AGAGGGGCCA GCAGCCAGAG AAGAAAAAGA AGAAGAAGAA GAAGAAGGAT GAAGAAGACC TCTGGTTCTC TGCTCAACCC

AAGCITICIC CAGATGGAGA AGAGACCATC ACTGCCTGIT TAGTIAGGCA GGAANGCAGA GGIGITICCT TICTGGGGCT AAAGNCTCCT TCTGACCACA CA

SEO ID NO:1116: (Length of Sequence = 416 Nucleotides)

CACCTITIGGG AGGTAGGGAT CATAGITCCA CITCATTGAT GAGGAAAACT GTAGTGCAGA GATGGCATAC ACTGTCCAAG
AACATGGTGG TGGATGGAAC CCAAACCCCA ACTTTTGCTC CCATGINCTC TGTCCACTGG CTATGGCTCT TGCCCCTGTG
TACAGATACA GGCTCTGGAC AAGTTCACCA AATCCCTTAG GCTTCAGCCC CCTCATCTGC AGAATAGTGG CTTGGATTCC
ACCATCTTCA AGGTCCCTGC CAGCTTINAT TTATTTAAAT TTGGATTTAT TAAGCAGGAA AAAAAGTAAT GGGAGTTTGT
GGGTACCAAT GGATTAAAGG GGGTNAAATC TGGNGGCTNG TGAGTAAAAT TAGGGTCCCC AAATGG

386

AAGGACCGGG ATTCTGATGA AGCCGTGTT CTCACTGCCT GAAGTTTCCC TTTGGAGTTC CAAAGTAAAG GACACATAAG CAACACTTCC AAAAACAAGG GAACAAGGGG GTTTATTGTA AAAACAGGAA ATGGTGCATG TCATTGAGAA CTATTTTAAT GCAGCTATGA AAAGGGAAAA AAGTGCCCAG TTCTTGATTT CTTAGATACT GAAGAGGACG TAGCATTTCA TTTATCAAAT ATAAGGAAAA TTATTCACCA TTTTGAAGCT CACCCTAGAC TATGAAAATT ATATTCACTG CAGAGCAATT ACTTCTGTCA TTACCTGAAG TGATCAGTAT CTATCTTCCT TGTCATAGCA TGCATCTCTC AAAAAGGCCT CCACTCCTTT CCCTCACATC TGTCGTCATC ATGATT

SEO ID NO:1118: (Length of Sequence = 379 Nucleotides)

GACAGCAGCG TGTCCAGGGC GGCTGTGGAG GTGTTCGGGA AGCTGAAGGA CCTAAACTGC CCCTTCCTCG AGGGTCTGTA
TATCACAGAG CCAAAGACAA TTCAGGAACT GCTGTGCAGC CCCTCAGAGT ACCGCTTGGA GATCCTAGAG TGGATGTGTA
CCCGGGTCTG GCCCTCACTG CAGGACAGGT TCAGCTCACT GAAAGGGGTC CCAACAGAGG TGAAGATCCA AGAAATGACG
AAGCTGGGCC ACGAGCTGAT GCTGTGTGCG CCAGATGACC AGGAGCTCCT CAAGGGCTGT GCCTGCGGCC CAGAAGCAAG
CTACACTTCA TGGACCAGTT GCTCGATACC ATCCGGAGGC CTGACCATTG GGTGCTCCA

SEO ID NO:1119: (Length of Sequence = 233 Nucleotides)

CAATATICAA GAGICITTAT TGAAGACTIG AGAIGGGACI TCCAACTCAG AGGAIGIGG AATCCCAGCI CAAATGATAC
AGGATAAACI GGGAIGGGCI AGGAIGGACA GGCIGIGGAT AIGGGAGICA IGGGICAAAG TCTIATCCCA GAIGGCICCA
GGIACAGIGG GCITCCIGGG CIGGAAGCIG GGICCICCCC ACTICATICI GCICAAAGCI TCIIGAAGGA GCI

SEO ID NO:1120: (Length of Sequence = 325 Nucleotides)

GAAAAAACAA CCATACCCIT NCITTIGAGG AAAACITACA AACITTATAA AGAATAAACA TGAATCINCI TAGAAAGIIC CAAGATAACA TACACAACIG ANICACCICI TCATATATAG GCACCACAC CATAAAGATG TAGCCTAAAT CACAATCACT TCICACCAGG GATGGAGATA GGAATTIACA TICTIGACIT CATTAAGICI CTAATTIGGC AAAAACCICC AAGCCITTTA TACACATGCI GCGIGIAGGC CAGATCICAC TCATTCITAT AATTGIGCAA ATAATATGGA GACCAAAAGG GCAGGGITTT CATTT

SEO ID NO:1121: (Length of Sequence = 161 Nucleotides)

ATTAGIATIT TIGICIGIAT GICCIAGCAC IGITCAACAA CAAAITITINC TAGITCTIGI TAATTITNAT TIGITATACA AIGGAAGCAC AAIGITATAA GGAAAGGIAA TITTAAGCIA ACAACCAGIG CACAGCCICA GGITTIAAAT TACAACCACA

SEO ID NO:1122: (Length of Sequence = 181 Nucleotides)

CATCITITIA CATCAAAGIA CTACCAAGIA AAGAATITAA AAATTACTIG TCTAGICATG ATATATITIC CINCIGCIGC
TGAAAAAATCC CIGICITATT ATTICATGIN CCITTATCAT TCATTIGATG ACACTGACAG CAACITGCTG AACAAGITTA
AGAATAGCTG ATATITACTG A

SEQ ID NO:1123: (Length of Sequence = 174 Nucleotides)

CCCTAGAGIT AAATITCACC CATGAAACAT CAGCCACATG TCATATCAAT TCAAGTGTGT AACATTGATA TAATCGGGTA CACCACAGCA GCACTGACAG AAACAGAAAT GATTCAGAGA AAGCCAATTA AAACAGCCAG GGGATAAAGC AGATCTGTAT GACATTAGCT TTTT

SEO ID NO:1124: (Length of Sequence = 232 Nucleotides)

CTTTTAGCAG AGACGGGTT TCACCATGIT GGCCAGGATG GTCTCTTGAC CTCGTGATCC ACCCGCCTCG GCCTCTCCAA GTGCTGAGAT TACAGGCATG AGCCACCGCG CCTGGCCCAG GGAAGGCATT TTTNAAGAAA TAATAGTTGA ATTGAGATCT GATAAAAGAA GTAGGAGCAA AATNGGGGGG GTGCAGTTTT CCAAGAAGAG AAGACAGTAC ATATAAAGGG CT

SEO ID NO:1125: (Length of Sequence = 233 Nucleotides)

GATACTATEG GITCAGTGAC ATAGAGACAC AATTGAATTA GCAATGAGCT TCACTCAGGA GCCAGAGAAT GGGITTNINT CTAAGAGATG TITTAAGTAA CATTTAAATG GCACTGCTGA TTGATACCAG CATCAGGAAG CTGAGGACAA GAGCTCTCTG AGAAGGAAGT TGCCATATTA CAGAAGTGAG GTGACCAAGC ACTINITGTA GGTCTGTACA TTTAGACATT AAT

SEO ID NO:1126: (Length of Sequence = 258 Nucleotides)

TTITITITI TCCTAGGGGC CGCAAGACGG CTAATTTATT ATAATTCCTC CGCCGCAGTT GCCCTCTGGC GCCL.37CGC
AGAACGGAGC GCCCGGGATG CAGGAGGAGA GCCTGCAGGG CTCCTTGGGT AGAACTGCAC TTCAGCAATA ATGGGAACGG
GGCCAGCGTT CCAGCCTCGG TTTCTATTTA TAATGGAGAC ATGGAAAAAA TACTGCTGGA CGCACAGCAT GAGTCTGGAC
GGATTAGCTC CAAGAGCTCT CACT

264

GIGIGAATAG GCAAGCACTI TGITTGITGI ACTAAGGAAC TCAAAATGAT AGGCITTTIG TCACCATGIG CITCCAGGNI
CTCIGITGCA TGAGCAGAGA TAGAGGATCI TGCACAAACA ATTAAATGCI CTAGCCATAA GIAGIGCAAG TITCCNITGC
TTGAAATTTA CIGCIGATAG CCACTTGGNC ACACCTTACI TCCAGAGGCI AGGAAGTACA GITTTCCCAC AGTCTAAGAA
TGAAAGAGNA TTAACCACAG TAATGCATAG CACTCATACC ATGGATGACT GGATAATTTI AAAAGAATGG GAATATGCAA
G

ACAGCTCAAT GACTTATCAC AAAGCAAAGC CCCAAGAAGT CACCACCCAG CTCCAGAAAT AACACATTGA AAAGCTAGAA AAATCTCAAA TTGACATCCT AACACCACAA CTAAAGGNTC TAGAGAAACCA AGAGTAAACA AACCACAAAG CTAGCAGAAG ACAAGAAATA ACCAAGCTCA GAGCAGAACT GAAGGCAATA AAGACACAAA AAACCTTTAA AAATAGTCAA TGAATCCAGG AGCTGTTTTT TTGAAAAA

SEO ID NO:1129: (Length of Sequence = 163 Nucleotides)

CAGTGGTACA GCAGCAGCAG ACACGCATCG CAGAGCTGGA GAAGACGTCA GCTGAACACA AACACCAGCT GGCGGAGAGA AGCAAGACAT CCANCTGCTA AAGGCATACA TGCATGCAAT CCGCAGTGTC AACCCCAACC TTCAGAACCT GGAGGAGACA ATT

SEQ ID NO:1130: (Length of Sequence = 382 Nucleotides)

TTTTTTTTT TTTTTTTTT TTTTTTTTT TTTTTACTGT TCAAACAGCA ATGTTTAGTT GTACAACACA TAAAGTCTAG CAACAATTAC AGGNCCAGTT TGAGTGTCTG TTTGCTTGTT TTCAATTGGG AAATTTAACT GTAATGTCAC CGTAAGATTG GCTGGGACTG GTAACATTTA AGAAACGGGT TGINCTTGCA TCCCCTAGGC GTGGGCCTCT TGCTCCATCA GGACTTGGTT GTAGATGAAT GGCCCACAAG TCACCAGCCT TTGAGCAAGT TGTGTCCAGG TGGAGACAGG AAGAGGGTGG GCAAAGGGGA ATTCTATAAA GACACAGTGT NTGGGGCAGT GGCAGTCAAC ATTCGCAAAC ATTCATGCAT CT

# SEO ID NO:1131: (Length of Sequence = 406 Nucleotides)

ATGCTAATTC AGGCTCCACA GATAGINCTG GTGATGGGGT TACATTTCCA TITAAACCAG AATCCTGGAA GCCTACTGAT
ACTGAAGGTA AGAAGCAGTA TGACAGGGAG TITCTINCTGG ACTTCCAGTT CATGCCTGCC TGTATACAAA AACCAGAGGG
CCTGCCTCCT ATCAGINATG TGGTTCTTGA CAAGATCAAC CAACCCAAAT TGCCAATGCG AACTCTGGATTT
TGCCTCGAGG ACCAGACTTT ACACCAGCCT TINCTGATTT TGGAAGGCAG ACACCTGGTG GAAGAGGCGT ACCTTTTTTG
AATGTTGGGT CACGAAGATC TCAACCTGGN CAAAGAAGAG AACCCAGAAA GATCATCACA GTTCTGTAAA AGAAGGTGTA
CACCTG

#### SEQ ID NO:1132: (Length of Sequence = 400 Nucleotides)

ATTITICGIT ACITCAGGCA GGAGGGTAGA CATAGCACTI ATCIGGATIG GATGTAGCCA CAGGATTAGA ATTGTTGGGT
CATAAAATAT GTACATGTTC AGCTTTAGTA GATCTTGCCT AGAGTTTAAA AAATTAAAAA TTAAAATAT TTTTAAATTA
CAATAAATTC AGCTAATTTT AATTTTAGAT AATTTTTATA ATGTAGTTGA TCTTGGTTTT AACCAGAGCA TGTNGCTGGA
TTTTNCTCCC CAATCGAACA CAGTAGAGAG AGAAGGTGGC GGGTTCTTAG TGATACCATG CACTTTTTTT TAGAACTTCA
GTGCTGTATC CCTTCATTTA CAATGTATGA TGAAAAATAC TAAAGAAGGG ATNGTGGTGG TGGTGAGGGA GGCAGGAGAG

### SEO ID NO:1133: (Length of Sequence = 347 Nucleotides)

CCCAGGGCCC GCCATCCATG GACGAGCTCA TCCAGCAGAG CCAGTGGAAC CTCCAGCAGC AGGAGCAGCA CTTGCTGGCG
CTCAGACAGG AGCAAGTGAC AGCGGCCGTG GCCCACGCGG TGGAGCAGCA GATGCAGAAG CTTCTGGAGG AGACCCAGCT
AGACATGAAC GATTTTAACA ACCTCCTGCA GCCCATCATC GACACGTGCA CCAAGGACGC CATCTCGGCC GGGAAGAACT
GGNTGTTCAG CAATGCCAAG TCCCCGCCGC ACTGTGAGCT GATGGCCGGN CACCTCCGGA ACCGCATCAC GGCTNATGGG
GGCACACTTC GAGCTGCGGC TGCACCT

### SEO ID NO:1134: (Length of Sequence = 389 Nucleotides)

GGTCCAGGCC TGCAAGACTT GCCTAGTGAG AAGATATAGG AATGGGAACC CAGGTAACAG TCTGGCCACT TINCCATAGG GCTGCTGCAG TATGCCCAGG GCCCGCTCCA GTCTCTAGTA GCCTCANATT TTCCAGTACC TGGAGTTATC ATCAGTGAAG CCTGTGAAACA AGCAAAGATG GCAGCCTACC GCTCCCTTTG GAAGCTTTGC CCTAGGGAGG TATGAATGAN CTTNITGCTG GCCCAAACAC ACCTGTAGGA GGTGGCTNGA GACCCCAGTT TGGAGGTTTT GCCCAGTGAG GAGGAATGGC ATTGGGAAAG TGCTTAAAAA AGCAGTCTGG GCCTCATTTT TATAGAGCAG CTGTGCTAAT GCTGAGGGGT CCACAATCA

SEO ID NO:1135: (Length of Sequence = 402 Nucleotides)

GCAGAGGCTT AAAGAGTGCT TATTCACTGA GGCTTGCCCT TNCTTACTCC TTCCTGGGAA CCCATTTGGC AACAAGTGAA

GAAACCTAGG CCAGCCTNCT TGAAGATGAG GGACCAACGG AGAGAGAGGC TCTGCTGTCC TAGCCCTCCC ACAGAATAAG

TAAGCCTAGC CAACACCACG TGGAGCAGAG ATGAACCATC TCAGTTGAGC CCAGCCCAAA TTGCTGACCA AAAGAATTGG

GAACAAATAA ATAATTATTG TITTIAAGCTA CIGIGIFITCT GOGTGGTTTT GTATATAATA GTAGCTACCT GATACATTGG GATGACCCCA ATTACTIGAA CITCICTTAG GCCTGFTTTA TCACGTGCAA ATAGGGGATA ATTTTAGTAA TITNGGGTTG

CT

SEQ ID NO:1136: (Length of Sequence = 381 Nucleotides)

CAGGIGGGAG CCACCACGCC CAACCCAGAA CICITITIAT TITGCAAAAT TGAAATICTA CCCATTAAAT AGCAACTCIN
CTITICCCIT CTCCCCCAAG CCCITGGCAA CIGCITITCC ATTICTATGA CAATCICTAC TCTAGATACC TCATAGAGGG
TGAATCATAC AGTATTTGIC CTTTTATGAC TGGCTTATTT CACTTAGCIG CTATATTATT AATACCAGCT TICTGGGGAT
ATAATTCACA AACTGCAGAA TTGAATGGIT TINAGTCTAT TCACATCGGA TATGITTTTG AAGAGACAGT AAAACCAATC
CTTTTTTCCT TAGGITCTCA GACACACACA TGCTTCTTTA TCTGGCAAGT CCCGTTATAA A

SEO ID NO:1137: (Length of Sequence = 325 Nucleotides)

TATTITITET ATAGACAGGG TCTIGITATG TIGCCCCGAC TGGTCTCGAA CCCCTAGTCT CAAGCCATCC CCCTGCCTTG
GCCTTCCATT CCTCTACTTT ATACCACGGT TATTCACCAA GCTTGTCTTT GTTCAGTGTA CTTCCTCATG GAAAAACTGA
GGTGATATIT ACCCTGGTTT TTCTACCAGT GTGTAACTGT CGCTAGTACC AGCTCAAAAA ATAAGAAATG AATAAAATGAG
TGATGACTAT CACTATGTTG CTCAGGCTGG ACTTGAACCC CTGGGTTCCA GTGATCCTCC CGCCTCAGCC TTCCAAGTAG
CTGGG

SEQ ID NO:1138: (Length of Sequence = 422 Nucleotides)

CAACACACAT TAGCCTTAAC AACAAAGAGC TAATCTTATG TAAAGAACTC TTACAATTCA GAAAGAAAAA GATCCTAGTG
AAAATGTGGG CAAGAGATAG CAAAAAAACCA GCCATATGAT AATAATAGTC AATAAGTGAA TCTGAATGAT GITATCTNCT
TTTGTCATTT TAGAAATACA AATAAAAATG ATGATGAATG CNCTTGCTTA CTAAATTAGC AAAANCTGGG AAAAGATGAT
GATATTCAGG GTCAGATAAA GGGAAAAGGG TGCCCTTCTA TTGCAGTTTG GAAAGTAAAT TGGCACTGAC TTTTAGTGGG
GATAGTCTTG TAATATGGGT CAAANGTCTT CAAATCGTGT CCACATTTTG GGGCCTGCAA TTCCACTTCT AGGGATTTAT
TCTAAGGAAG TACCTAAAAA AT

SEQ ID NO:1139: (Length of Sequence = 367 Nucleotides)

ATACCGAGAA GCATGCAAGC GGTGGCTCCA CCGTCCACAT CCATCCCCAA GCTGCTCCTG TTGTCTGCAG ACACGTTTTG
GATACACTCA TTCAATTGGC CAAGGTATTT CCCAGCCACT TCACACAGCA GCGGACCAAA GAAACAAACT GTGAGAGTNA
TCGGGAAAGG GGCAATAAGG CCTGTAGCCC ATGCTCCTCA CAGTCCTCCA GCAGTGGCAT TTGCACAGAC TTCTGGGACT
TATTGGTAAA ACTGGACAAC ATGANTGTNA GCCGGAAAGG CAAAGAACTC CGTGGAAGTC AGTGCCAGTG ANGCGCTGGC
GGTGAGGGGG TAAACCTTTT NCATACAGCC TTCGAGGCCT CTCCACT

SEQ ID NO:1140: (Length of Sequence = 412 Nucleotides)

ATCCAAAGGA TATAGGCAAG CATCAGATAC AGCCAAAGCA TICTITICCT AAAAGAGTCT GAACGCATCT NATGCAACAC CCAAAAAGTAT CCCTITNCTC CTCGTTACAG TATGTTTTGG CTTTGGAATA AATGATTAGT TATTGAACAA TATATGGAGA AATATCTTAC AAAAGGAAGT CATTTCCATT TICTAACATC TITTACATTG CACTAATTAC ATGGTTTAAA TGACTATCCC TAATCTTCAT CCAACTACAC CCCATGAATT TNAGGTTTAT TTAATCAACC TAGTTAGACC AGATATATCC TTCTAAAATC

ATTIGIAGAT AGAGGATICI CCTTTTIGCT AGIAAATACC ATTAACATAT TINCAGANGG CCTGGTCTAG GGTCATTTAT
TCCAGGGCCT CT

SEO ID NO:1141: (Length of Sequence = 410 Nucleotides)

GTTAACCTGT GGCGCCCTCC GGGTATCCGG CGCCTGANGT TTTAGCTGCG GTGGCCGCGG CAGTCGGGAC CGACTNAAGA
TGTCATTTGT CAGAGTGAAC CGCTGTGGTC CCCGANTTGG TGTAAGAAGA ACACCGAAAG TAAAGAAGAA GAAAACTTCA
GTGAAACAAG AATGGGATAA TACCGTGACT GATCTAACCG TTCATCGGC AACTCCTGAA GATCTGGTAC GCCGTCATGA
AATACACAAA TCGAAGAATA GAGCATTAGT ACACTGGGAA CTCCAAGAAA AAGCTTTGAA GAGAAAATGG AGGAAGCAGA
AACCAGNAAC TTTAAATCTT GAGAAAAGAA GATTNGTCTA TCATGAAGGA GGNTTCTTTC TGATCAATAC CAGATGCAAA
GATGTGTTGG

SEO ID NO:1142: (Length of Sequence = 392 Nucleotides)

TITITITITI TITITITITI TITICCNGG ATTGAATGIC TITATTAAAT AAACGAGIAA ATGGTAGCAC AAATCACCAT CAATATTITIT GGAAGGATTG GGGACAAGAT GICGAGTCAG AATATAATIN TCCATTTCAG GGTCCCAATG TAGCTGAAGA ACTGTGCCCCA CTGATCAGIA TIACGTATTG CAAATGCAGG AGGTAAGGCT AAAATAGGAC TTATGCCGTT CAGAAGATTG ANTITGAAAC CTTAAAAAACT ATCATAATAG TAGGAATGCA TGTTAAGATT TGATAACTTT CTTTAGCTAG AGTTTCAAC CCACAGTTAG GAGCAAAGTT GTAAAGTGAG TAGGTNTGAA GAAGGGACAC TCTTTTGAGA AAAGAAATIN GC

SEQ ID NO:1143: (Length of Sequence = 200 Nucleotides)

ACTICCICIC ICCIGGCAIC IGCIAIAAAA AIAAGAAGGA GCAAAIAITC ITGCCICITI ITATCACCIG ANCIGAAAAC CCATIGIAAC IGCCAIGAAA AIAAGCACIG GICCAIGAGA CCAAIGCCCA GAAAAITCAG GCIAAGAITC CIGGAAAGIG GGCIGIGGGC AITATIIAAA ACACACACAC AAAAITTACC

SEQ ID NO:1144: (Length of Sequence = 333 Nucleotides)

AACAGAAGCA TGITATTICA TICCCATICC CAGAAAGGGA GITAAIGAAG ATAAAAATIT ATTITITAAG GICTITATIG
AGAGAAACIT TGITITCIGA TATGAACTAT TGCAGATGIT TITATAAATA CITICATTAA AATGAIGIAA ACAGIAGTAC
CCAACACTGI AAACTCAGIG AAAATAGTAA ATGAITCITT TATTACTAAG ACTGICATGC ATTCIGAAGC AGFTGGCTIT
TITTTAACCA TAGGAAGTCA TITCCCTCTA GCTCCTTCCC TICTACTCTC CIGCTCAGAC CATTAGTAGG TACTTTGITA
AATAAAAAAC TAG

SEO ID NO:1145: (Length of Sequence = 225 Nucleotides)

TGGGTTTCTG ATCCGAGAAA AATTGAAAGA CAAACATGGC TGGGGGAAGC AAAACGCTGA CACACAATTC AGGTGGCCCA GCAGTGCTGA CCTGCAATCC ACCCCACCCC AAGGCAGCCC TTTCAATCCA AAGTGGACAG AGTGGGCCTT ATCCCAGANT CACTCAGGAA GCTTCTTCAA ACATATGACT GCCACACCCG CCCCCAAGGT TCAGAAACAT CTTCG

SEO ID NO:1146: (Length of Sequence = 223 Nucleotides)

AAGGNACAAT ATTATTCTAA ATAATTTAGA TTTGGAAGAC ATCAATGACT TTGGAGATGA TGGGTCCTTG TATATTACTA
AGGTTACCAC AACTCACGNT GGCAATTACA CCTGCTATGC AGATGGCTAT NAACAAGNCT ATCAGACTCA CATCINCCAA
GTGAATGTCC CTCCAGTCAT CCGGGTGTAT CCAGAGAGTC AGGCTAGAGA GCCTGGGGTA ACT

SEQ\_ID\_NO:1147: (Length of Sequence = 389 Nucleotides)

ATTICAGIGG CCATTAAGAC CCIGAAAGIT GGCTACACAG AAAAGCAGAG GAGAGACTIC CIGGGAGAG CAAGCATIAT
GGGACAGITT GACCACCCCA ATATCATTCG ACTGGAAGGA GITGITACCA AAAGTAAGCC AGITATGATT GINACAGAAT
ACATGGAGAA TGGITCCITG GATAGITTCC TACGTAAACA CGATGCCCAG TITACTGTCA TTCAGCTAGI GGGGATGCTT
CGAGGGATAG CATCTGGCAT GAAGTACCIG TCAGACATGG GCTATGITCA CCGAGACCTC GCTGCTCGGA ACATCTTGAT
CAACAGTAAC TIGGIGIGIA AGGTTCCIAA TITCGGACTT TCGCGTGTCC TGGAGGATGA CCCAGAAGC

#### SEO ID NO:1148: (Length of Sequence = 386 Nucleotides)

ATTAATTECT TECCATCATE ASCAGAAGCA ASCGTGACAA CAATTITNAT AGTGTAGAGA TITGGAGATTC TACATTCACA
GTCCTGAAAC GNTATCAGAA TITTAAAACCT ATAGGCTCAG GAGCTCAAGG AATAGTATGC GCAGTTNATG ATGCCATTCT
TGAAAGAAAT GTTGCAATCA AGAAGCTAAG CCGACCATTT CAGAATCAGA CTCATGCCAA GCGGGCCTAC AGAAGACTAG
TTCTTATGAA ATGINITAAT CACAAAAATA TAATTGGCCT TTTGAATGTT TTCACACCAC AGAAATCCCT AGAAGANTTT
CAAGATGTTT ACATAGTCAT GGAGCTCATG GATGCAAATC TTTGCCANGT GTTCAGATGG GGCTAG

# SEQ ID NO:1149: (Length of Sequence = 364 Nucleotides)

GCCAACAGGG TGAGACTCCA CCTCAAAAAA TAAAAAAAAA GAAAGATATT ATTCAAGAAA AGAACTTAGG AGCCAGGTGC AGTGGCTCAT GTCTATTATG CCAGTACTTT GGC.'GGCCAA GGCAGTAGGN TCACTTGAGG CCGGGAGTTC AGAGACCAGT CTGGGAAACG TAGCAAGACC TCGTCTCTAC AAAAAAAAGTG TTTAAACAAAT TAGCTCAGTA TGGTGGCACA TGCCTGTAGT CCCACCTACT CAGGAGGCAG AGGCAGAAGG ATGGCTCGAG CCCTGGAATT CAAGGCTGCA GTGAACTAAG ATGGTGCCAT TGCACTCGNG GATGGGTGAC AGAGCAAGAC TCCATTGCCG CCAG

#### SEQ ID NO:1150: (Length of Sequence = 267 Nucleotides)

GACAGGIGIA ATCTAAGCTT AAATAAACCC CCCGGAGGCT GCACAATINC TIGGCATCTC TCCCCIGCCC TCTCCATCCG CATATICATT TIGGAGITIG GAGAAGIATC TAGAATCINC TCCCACCCCA AAATGCCCAG CAGAGCCCCC CCGCCGCCCC CGCACCCCTT GGAGCIGCGG CITGCTGAAT CGTTGAGATG TCTGANACIG TCGGGGTTCC CTACCTAGIG CITCAACCAG ATCACCTCAC TTTTGAGTTT CCTTCCT

### SEO ID NO:1151: (Length of Sequence = 386 Nucleotides)

GGAAGACGAA GGAGGAGTAA AGGCATGINI CACATGGCAG CAGGCAAGAG AGCGTGTGCA GGGGAACTGC CCCTTATGAA ACCCTCAGAT CTCGTGAGAC TTATTCACTA CCATGAAAAC GGCACAGGGA AAACCTGCCC CTAAGCTTCA GTTACCCCCG ACAGGTCCCT CACATGACAC ATGGGGACTA TGGGAGCTAT AATTCAAGAT GAGATTTGGG CAGGGACACA GCCAAACCAT ATCAGATACT TACCACATTA GACACTGACA GACAGCTCAC CACAGATTCT GGGCTCTATT CAAGGTGTTG ACTTTGATCT TTTTCCAGTT GTAAATGTT CATCCAAAAA AACTGTGATT TTGGCATAAC TTTTTTCAAG AGTTGC

### SEQ ID NO:1152: (Length of Sequence = 239 Nucleotides)

GCAATCITIT GAGIGACITA CTITGAGICI TIGICACCIT TCCICIGATI TITICACAIG GITIAACICA GIGIACCCAA GAGIACIAGG IGCACTCAAT ICIGCIAITA ACTCIAIAAG CAAGINCITA AGAAAGITAA IGITAAAAAAA TAATCITAAA ATIGICITGA TAGGAAAAAT GIATITGAAA TIAAAAAAAA TICTIATGIT GACTICIIGG TITIGAAACA ATGAATATA

SEO ID NO:1153: (Length of Sequence = 275 Nucleotides)

CAACCICCIC TICAGIGICA AAAAAGCCAC GGITAGACCA GATTCCIGCC GCCAACCITG ATGCAGATGA CCCTCIAACA
GAIGIATGIT TIGITICCIC CIITCATCIC TAATAATIGA TITACCATGI TITITCIAAAA TACITGITAT GICITINCIT
TAAGAAGIGA CATATATITA TGITTAGITA CIGITATICA AATATAGCCC TGACCICAGI GCTAAACTIT ATAGITGATI
TIAAAATCAA AAGIATTATI TIGIGGGACT TIAAG

#### SEO ID NO:1154: (Length of Sequence = 203 Nucleotides)

CCTAAATCTT AAACCTTACA ACAGTTAAAT AAGACCCCTT TCAAAGGGAT TAACACACTG AATATTATAT ACATACAGAT
TTATATTTAT GCGCTATACA CATATATGGA CTTTATCTGT ATATAAATAT GTGATGATAA TGATAAAAGG ATAATGATTA
CACGTAGGAT AAACATTTAT CAAAAATTGT ACTATAAATA ATA

### SEO ID NO:1155: (Length of Sequence = 343 Nucleotides)

GAAAACAAA CACTAAGCTA TTTTGGAACA ACTGTTCTAC ACAGAAGAGA GCTTCTCTTA ATTTAAAAA AAAAAAAATC
CCAAATAGGC ATTTTTAGGC ATTAACCAAA AAAGAGAATC CAAATGAAAT ATTATACTTG ATGTTCAATT TTAATAGCAT
CTTGATAAAG GTATGCTTCC TTTCATTTGA NTACATTTCT GNACATGTAT GTTATAAAAT CCAGGNAACA GCCAAACCAC
AAGTTAACTC TTAACAATGA ATATACATAG TTAACCCTAT AGTAAGCAGC CCCTTTGAAA AGCACTGATG CACCCAACAN
TTATATGGTT CCATTTCATA AGG

# SEO ID NO:1156: (Length of Sequence = 396 Nucleotides)

COCACCAATT GCCATTAAAC CTCCCAATCT TTACTGGGAG GNICTCTACT TACTGTTCA AGGCAAAAAG ATGATTAANC
TATCTCACAT GGTTGTAATT TGGGCCTAAA ATAAATGACT CTAGTGGTAG CATTTCATGT AGGCAGGTCC AAGGAAGACA
GATTTGTAGA CAGAGTTGGG AAAAGGGTCA AAGAGCCAAT GAGTCTCCCT ATCCTGAGGG ATGCCTTGAC GGAGCCACAG
CATGANCTCA TGTTTTCCTG AATCCATCTC AGTTCATGTG ACAGGATGGA AATGCTTCCT TTCTTAGCCA GTGTTGCTTG
TAACGAGTTC CCTGCAGCTC AGGGAAGGG GCAACATGTA CTGCTTTGTT GCTTCCTGTA TAGAGAAGGC AGGAAT

#### SEO ID NO:1157: (Length of Sequence = 269 Nucleotides)

CAGGITCICA ATCCGTCTCC CAGGCTGGAG TGCAATGGCA CAATCTCAGC TCACTGCAAC CTCCACCTCC CGGGTTCAAG
TGATTCTCCT GCCTCAGCCT CCCTAGTAGC TGGGACCACA GGCACTCGCC ACCGCAACCA GCCAACTTTT GTATTTGTAG
TAGAGACAGG GCTTCACCAC GCTGGCCAGG CTGGTCTCAA ACTCCTGACC TCAGGTGATC TGCCTGCCTC GGCCTCCCAA
AGTGCTGAGA TTCCGGCGTG AGCCACTTG

## SEQ ID NO:1158: (Length of Sequence = 190 Nucleotides)

CTIATIAGIT AATTCCACGG CAGATITTCA TITICIATICGA ATATATIATA TIGIAGAAACT AGGGCCITAA ATAATTAAGC TGACTITINCC TATTAGITAT TCCITAAGAT AAAATTATGC TIGIGAAAAT NACTIGINGAA TITICICAAGA AATTAAGCTC TATAGAGGCA TAAGTAATCG AAAGACTITT

# SEO ID NO:1159: (Length of Sequence = 340 Nucleotides)

GGGCACTGAC TTCCTGGGAG TGTAAGCNNC TCACCTGGAC CCCACAGCCA GTGAGCATTA GTGCTTATAT TCCATCCTCC

AAAGCTCTTT CTTCATACCA GACCACACAT GTGGCCCAAG GAGGGATATT TACTCTGCAC TTTTAGAGTT CTAGAAAACA

TTGTTTAGTG GTCTGGCATC ATCTATATTT ACTTGGCTTG ATTTGGGATA GAGTATAATC CTAGTCCTCG ATGAAAGGAT

TTTNATGAGT TAACCTTATG GGGTGATGGG ATTTATGGGA TTATTTCCAC CCTTAAAATG ATTTTGTGGG GAAAAAAAGTT

GTACTAATCC CTAATTTAGG

SEO ID NO:1160: (Length of Sequence = 215 Nucleotides)

GTAAACAAAT CAATTAACAT GATTATCCCA GACCITTCIT TICTTACIGG AAAAAAGAGG GCATTAAACT GGATGATGAC AATAACACCA TAACTACAAG CITTTATAAA AGICCITTAT ATACAGIGIT AATACAGIGA AAGNICAACC TTATTGAAAG AGGICIGGCI TCIGCCCTCA GCTACIGGGA AACAATCACI AGGCCTCIGG CATGI

SEO ID NO:1161: (Length of Sequence = 298 Nucleotides)

AATCITTAAA ACTACITIGA ATCITATAGA AACATCAGAA TCITITGAAT TCAAAAGAAG CCAGGGACTC TAGCCAAAGT GGAGIGGITT TITAACICAA GGATITAGGA CCITGGCIGA ATACAAACAT TGAATGATTA CTCAGTAGGT GCCAAAGCTC AGGACITTAG ACAGAGICAG AGICCAGIIT GINCIGAAAC ACAATITGAT TTCAACTATT GITITAAGIG AGAGAGGAAA GTGACATTAT TATGAGIGIA AATTINCIGC TITIAAAGIA GAAGITACTG ACAATIGA

SEO ID NO:1162: (Length of Sequence = 163 Nucleotides)

GAAATAAGAA ACAGCITGTA TATAACTAAT GCTITGAGGG AGAAATTCAA ATGGCTATGA AAAAATATTT ATAATTCAAT GATAATAAAA ATCTTACACG TTAAAACTTG AGAATGTAGT TAAAGCAATA CITGGCCATA ANCITAGCAC ATATTAGTAA AGA

SEO ID NO:1163: (Length of Sequence = 393 Nucleotides)

GCCAACACCA GGAGCATTIT ATTCAGATGI TAAATGAACC AGTICAAGAA GCTGGTGGTC AAGGAGGAGG AGGTGGAGGT
GGCAGTGGAG GAATTGCAGA AGCTGGAAGT GGTCATATGA NCTACATTCA AGTAACACCT CAGGAAAAAG AAGCTATAGA
AAGGTTAAAG GCATTAGGAT TTCCTGAAGG ACTTGTGATA CAAGCGTATT TTGCTTGTNA GAAGAATGAG AATTTGGCTG
CCAATTTNCT TCTACAGCAG AACTTTGATG AAGATTGAAA GGGACTTTTT TATATCTCAC ACTTCACACC AGTGCATTAC
ACTAACTTGT TCACTGGATT GTCTGGGATG ACTTGGGCTC ATATCCACAA TACTTGGTAT AAGGTAGTAG ATT

SEO ID NO:1164: (Length of Seque ce = 260 Nucleotides)

SEO ID NO:1165: (Length of Sequence = 330 Nucleotides)

CATTGGIATT TAAAAATGAA TATTAATATA ATGAAATGCN TITGCCTTT TGIAGGCATA ATAAGCCAAA TACTTTTTTA
CCCAAAATAA TITINAGAGA AAATGATGTA ATGAAAAATT GIACCATGAA TIAGGAGCAT AGTITITNCC ATTTAAACGT
CACCATTACT TAAAAGATGA TIGATTATTG CIATACCAAA TCAGAAGAAC TCIGITCATC ACTTTCCINC TCIGICCCCA
AACAATTIGG TICATTCAGA CIGAAATGIT TGIGICTICA ACTTATTAGA ATGGAAGATA ATGCAGATAT TICIGIGGGA
AATAAAATAA

SEQ ID NO:1166: (Length of Sequence = 312 Nucleotides)

ATTGGAGATG CCTTTGTCAA ATTINCCCAT TITAAATGGC CAGGAAAAAC AATAATTATT TTCCTGATGC TGAGGTTTTA
TATCTTAGTA GAAGAACTTA AACTATGACT TGTATTCAAG TCTAACAGGA ATAGAGGTAA TGANTGAAAG TAGTCATTGA
CCTGGGACAA GATCACTTTG AACATGACAC TATTATACAA AGTGTAATAT TTATTTTTAA ACAACCACTT TTCAAAAGCA

## GITGIGCATA CATTCCAAAG AATAAAATGC TAGCTACTAG GTTTTCAGAA GCAGAATAAA ATATGATACT GA

SEO ID NO:1167: (Length of Sequence = 305 Nucleotides)

AGGAAAAGGA TIGATCACAG GAGAGGTACC AAGGGAGTTC CCAGAATAAT AGAAAAGAGG NICCICAAGA AGACAGTCAC
GCAAGAGACC AAGAGAAGAG CIAATCCAAT TGATGCAGGA GGAAGTAGAG CITCAGAAAG AATGTCTCAA AAAAGAAAAA
AAAAGAAAAG AGTGGGTTAA GIATCTGATG ANTITNCCAA ATTGAGAGGA GTTACATAGC TCTATTGAAA ATCTTAGATA
AANNTGATTG ATAAATACAT AGANCATAAA GCAAACACTG AAATAAGGCA ATTATCAACT CCAGG

SEO ID NO:1168: (Length of Sequence = 342 Nucleotides)

AAGGITTIAG TGATGATICA GIGAGAAACA TATTIGAAGC AACAAGCACA GIAACIGGAA GCIGIAGGIA CICAATAAGI
GICAGITICC TICCICITCI AAAAGCIGIG CITICAAGIC AATIGIATGI CIAGAGICGC ACIGICIGGI ACAGIGGCCA
GIACIAGCCA CATATGGCIC TCAAGIACIT TAAAGAGGGC TAGICIGAAT TGATATGIGI CATACATGIA AAATACTITA
AAGAGGGCIC ATCIGAATIG ATATATGCCA TGCATGIAAA ATACAAATCA GATTICIAAA ACITIGIACC AAAAAATACC
ATAAAATAAC TTACTAATAA TT

SEQ ID NO:1169: (Length of Sequence = 397 Nucleotides)

GAGACGGAGC TOCMICIGIC GOCAGGCTIGG AGTIGCAGTIG CACGATCTTG GITCACTIGCA AGCITCACCT COCAGGTTCA
CACCATTCTC CTGCCTCAGC CTCCCGAGTIA GCTGGGACCA CAGGCGCCCCA CCACCACGCC CAGCTAATTT TTTATATTTT
TAGTIAGAGAC GGGGGTTTCA CCGTGTTAGC CAGGATGGTC TCGATTTCCT GACCTCGTGA TCCGCCCGCN TTGGTGTCCC
AAAGTIGCTGG GATTACAGGC GTGAGCACCA ATGCCCAGCC TTTGGAGACA CTTTTGATTG CCACAACTCA GGGTAGGGAG
GGCTGGGAAA TATTACTGGT GTGTAGTGCA TCGAGGCCAG GGATGCTGCT AGACATCCTG CAATGCACAA GGACAGG

SEQ ID NO:1170: (Length of Sequence = 422 Nucleotides)

GITTIAAAGC CICIGGACAG AGCAGIATIT CGITIAAAAC ITIGITTIC TIAAAAGCIT ACAGIGITIG GCIAATICIC CICCCCITIT TACAAGACGG GGGCCGGAGG GIGGACACIG GIGGCAGGIT AAGCGATACI GICACTITAA GAAGCCIGCA GAITGAAGIG TAAACATGGA GAAATTAGGG GCIGATTITI TAAACIGIGT GAGATATTAA CCAGCCGCCC TGITATAAAA TCAGGAAATC CAAACAGCGA TITACACCGA TITACACCCC CITTATATAT TITINACAAA AATACACTGA GAAAATAATC AAACGITITC ATCTCCTIG TCTTTTTTIG TTTTTTAAAA GIGICAAAAG TCTACATNIA AATATAAAAN ATTAAAAGIT AAACTCTAGC CCTTCAGIGA GG

SEO ID NO:1171: (Length of Sequence = 384 Nucleotides)

TCIGAATGG TIGGIGAAAG GITACAGGAG CAGACAGCCI CCACACCCAG GCIGCICTIG GCIATACAGG CIACCTCCAT
CCCIGANIGI IGIAATAGGA AAGICIAAAC ACACAGAAGA GGAGCACAAA ACCAATAATI ATCACACATI CAAAATAAAA
CTAATCCATA AAGAAAAGIA CCAAACTCAA CAAAGACAGC AATGCCIGAA AACACTGGGC IGIATCAGCA AATAGAACAA
AGAAAAATAN GCATAATTAA AACAGTAGAA GGIGAAGGAT AATTITTAAA ANITAGATAT CATATICIGA TIATIGAAAT
AAAAAACTTA GTAGAAAAGC TIAACTGAAG AGGATCAAAC CIGAGGAGGA CCCCGCCAGT ITIG

SEO ID NO:1172: (Length of Sequence = 418 Nucleotides)

GAGAGAAAA AAAAAAATCT TTIAAAAGCT GCCATCTGAG GTGATGGCTT CTCTGTACTT ACGCCATACC CCAGANIACA ATAAATAAGC AATTAGAAAA CGTTCAAGTA TGAAGGGATT TCCTCCTCCC CGCCAAAAGC ACTGCTCTCT GAAGGAAGCT GGITTCICIG TAGCTACACC AGCIGITCAG AAAGCTCATI GGACCIGGIT TIGAAAATAA AACAAAGITA AAACCCIGGG AGGAGITATT GINCAGIGIG GAGTACTCAG GCITTCITAT AAAGAAAAAA AAAGGITATC TGGTACCAAA GIGIGCACCT ACAGACCCTC AGGTACTGCC CIGIGACTIC NCIGIATGAC ATCACAAGGC TGCCAAGIGC TGCITINCTA GACTAGGGAG TIGGTGAGGT TITGCTAG

#### SEQ ID NO:1173: (Length of Sequence = 274 Nucleotides)

GAGATCIANA TGANATITAT AAGAANATIG TGGGITCIGC CCAAGAIGAC ATCIANATIG AAGAAGGIAC ACAGIGAGIT
TAAAGGATCA ACGAGAGAA CTITIATIAT TCATITGCAC AAGAAGACAC ATTCAGIATC TGGATTATCC AATAITATGA
ATACITIGAG TIGAAATGAT TAAAGGGIAA TCITIAATCA TIAATTAACA AATCATTAAT TAANCAAAAT AATAITITAGC
AAATTAAGCA AGINCTAAAG GCTACATGCA AACT

### SEO ID NO:1174: (Length of Sequence = 326 Nucleotides)

AGAAATTAAA ACACTITAAT ATAAACATIT CCAGAATATA GACTGACCIT ATATCAGTAC TITINGAGAC CGITITAAAA CTATATATCA TCTAAGITTA TIATAGACIG TITCATTITC CACTITCAGA ACTAGAAAAT GCAAAAATAC ACTGCAAATT AGATTTAACA AAGAAAAAAT CAGTITAAGA TATTTCATAC ATATTCCTTG GNGAAAGCTG AGACACATAA ACACAGNAAA ACAACAATAA AATACCACCA ACACTAACAC AAAACCAAGG AAAGAACTGA TTTTGTAACG CTTGGTAATT CTGTCCTTTA AAATAA

#### SEQ ID NO:1175: (Length of Sequence = 426 Nucleotides)

GCAGTCAGGA TOGACACATT AGAAAGAAAC ATTITAGITT CAATGITACC ATAAAAACCAG AACGAAAAGC AGCATGCTGI ATTATATITIN NCAATTTAGG TTCCATITCT AACTCCACCT AAAATGAATA TGAACAAACT CATTITTAGA TGITTGTCAG TCAAATACAA TAATAGTCTA AGITTATTCA CATATGTACC AACCAAAGCC CAATAAAGCT AAAAGGAAGC CAAGTGTAAT AAAAAGGCAG CTATAAGGTC TTGTGTTGA NITTTTACCC AGCAAGAAT AAATGATACT TAGTAATCCA TCTTTCCCCC CCACTGCCAT CCCTGCACAC ATCTAAAATA GGCTAACTTC ACCTATTCTA ACTTCTGAAA TTGTTTTGGG ATTCCTGTTT TACTTTCTCA GAGTGGATGG TATAGC

#### SEQ.ID NO:1176: (Length of Sequence = 301 Nucleotides)

CTAATCCICA ATCCTATCCC TTINCCTCTI AGCCATCCTC TCTAATTINT TTAACCTAAG CCTGTGTGTC CTCAGAAAAT
AGGTTATGCT GTTGGTGTG GTGGTTGGTA ATCTACTATA ATGCCTCTA CTTATTGATT TTGTTTGGTA ATCTCCCTTT
TTACTCAATA CTATATTTAT AAGANCCNIT TAAGTGGTTG TATGCCTCTA CTTTATTGCT TCTGACTGCT GCATGCNATT
CCATACTCAT GTCCACCACA CTTACTCATT CTCCCTCTTG ATGGACGCTG AAGTTGCTTG G

# SEO ID NO:1177: (Length of Sequence = 331 Nucleotides)

GCAATTCTCC TGCCTCANCT TCCTGAGTAG CTGGGATTAC AGGIGCCTGC ACCACGCCCG CCTAATTTTT GIATTTTTAG
TAAAGACAGG GTTTCACCAT GTTGGTCAGG CTGGTCTCGA ACTGCTGACC TCATGATCCG CCCGCCTCAG CCTCCCAAAG
TGTTGGGATT ACAGGCATGA GCCACCAAGC CCGGCAAATC CATGCTTTTA AACATTACTC TGTATGGTGT GATAATGAAC
AGTCACTGNT ATCTGACTGT TCATCTGTGT GGTCCATCTG TATTGAATAA AGGAGGAAGG AGTTGAAGGA TAAAGGGGAA
AATCTTGCAG A

# SEO ID NO:1178: (Length of Sequence = 325 Nucleotides)

GAAATINITG GAGAGAATAG TCATACCTAC TITAAAAGAG AATAAATIGC CITICCTAAA INCCICIGCT TCGCICCTIT CCIGGCGITG CICIGGAACC TIGIGAGITA TATGIATGAT INCIGIACIC TGATATCCAT CAAAGIGCAT AACATAGTAC TCATGATGCA GTAAGTACAA ATCITTITTG AAAGAGATAT TGCTTGINAA CATTTTGGAT TTATAACATT GGCTTATAAT ATATACAACA TCTTTATAAA TGCCACCTCA GTTGGGTTTT AAGCCTTACA AGAGTGCTAT GAGTAAATAT CACCCACTTT AAAAA

#### SEQ ID NO:1179: (Length of Sequence = 297 Nucleotides)

CCTTGGGAAT TGTTTCTTGG AAATTAAAGC ATGTGTCTCA CACAAACAGT AGAAGGCATT GAGCATTCAT TAGTCTTTCC
TCAAGAAGAT ATCAAAATGA GACTAGAAAC TCTCTGGTGA ACACAGAATG CTCTGAGGGG GNCCAAGGTA CATTATGACC
TTAAAACGAA CTCCTTCTCC ACTGGCCCTA TTACTCACTG TGGAAAGCAC CATGCCAGGC ACAGCAAGAG ACTTAAGAAC
ACCTACAAAG GAAGATCTCT NCCATCCACT TGTGTAATTA TCTTTAAAAA GTAATCC

#### SEO ID NO:1180: (Length of Sequence = 278 Nucleotides)

GCTGCTTGGG ACTTGAAATC TGTGGCCGAA GACCNGTCAC TACATAACTT CAAAAATAAT CAACCACCCT CCCTTCCCAA
ACCACCCAAA TTCACTCATC CAGCGTTTAC TTTTTTGAAT CCACTCAGAA CTTTTTTGAT CCAATGAGGC CCCCTAAATG
AGTTGGGTGG GGGGGAAATG AATACTGAGT TGGCCTTTAT TTTTTAAAAG ACTTTTTGAT CCAATGAGGC CCCCTAAATA
ATTGAGTTTT GGGTCCTGGT TGGTTTGTTT TATTTTGT

#### SEO ID NO:1181: (Length of Sequence = 331 Nucleotides)

AATTGAGTTA CAGGAGAATA CTGTGAACAA TTGTACAGCT AAAAGTAATA ATCTAAATTA AATGTACACA TTCCTAGAAA CACACAAATC ACAAAANCTG ACTCAAGGAG AAATAGAATA TCTCCAACAGA CCTATAACAA CTAAAGATAT GGAATCAGTA ACCAAAAAGCC TTCCAACAAA GAAAAGCCCN GGANTAGATG ATCTTCACTG ATGGNTTCTA CCAAACATTT AAGAAAGATT TAACACTAAT TCTACTCAAA CTCTTCCACA AAAAATATGA GANGAGTAGA GAAAACTTTC TAAAATATCT TATGAGGGCA GCATTACCGT G

### SEO ID NO:1182: (Length of Sequence = 345 Nucleotides)

GIGIGINIAG AGGATGGAC AGGATGCTGI TIATTINCCC TITCTIGGAA ATGGACCTTC TGTCCCTTCC ATTTGGACAC
CACAGIGGAA GCTGGIGGCC TGGAAGGAAG GATTAGGTCA TGGACATTTG AACAGGIGCC TTGGGCATGA TGTATAGATG
CAGTCATATA TACCTIGCTG GGNIGGGGIG CCACCTCCAG TGCNCAGCTC CAGATCCAAG GAGCAGCCCC CTGGGGATGG
ACCCCATTCA TTCATCATGA CTCCCAACAG TTTTINATTG TGGAAGAAGA AACTTINGCA TTATAGAGAC ATCATCACAA
AACAGTANAA ACAAAATCAA CCCTG

## SEO ID NO:1183: (Length of Sequence = 272 Nucleotides)

ATGGAAGATT CAGAGATCAA AGGTGAAGTC CTCTATCTCG GCTACTACCA ATCAGCCTTC GACTGGNATG ATGAAACANC
CAAGGCCTCC AAGCAGCATC GTCTTAAACG CTACCACAGC CAGACCTATG GCAATGGGTC CAAGTGCGAC CTTAATGGGA
GGCCCCGGGA GGCCCGAGGTT CGGTTCCTCT GINACGAGGG TGCAGGTATC TNTGGGGGACT ACATCGATCG CTTGGACGAG
CCCTTNTCCT GCTCTTATGT GCTGACCATT CG

### SEQ ID NO:1184: (Length of Sequence = 335 Nucleotides)

ACATTITICA AACTCAGITG ACTCACCTCA NATTIGCCAT TOCAATTACA GGGCCTCGAA AGAGICAGCA CICAGCCTIG CICAAGGNIC AGATTIAGGG GITGCCCCCC GNCCCGGCAA CCTCCCACCT ATTGITTCAA ATGICCTCAA GACAATCACC ACTGIATTAA GAGAAAGAGG CATGGGGGCA GAGCAACAAG GAAATAAATG AGGCTTGAGA ACTGIGTCTA GGTGGGGTTA CTTTGAACCT TAAACCACCC TTGGGNCCCA AATCTGCATG AGCAGGGGGT GGGCTATCAT GCTACAGANC CCCAAGGAGG ACATTITTCC CAACA

SEO ID NO:1185: (Length of Sequence = 383 Nucleotides)

GAGAGGTGAG CAGGCGTGCG GGGGGGGAC TTCTGCAGAG AAAATATTTT TAAAGTCATA AAACCATGAA AATAACAACT
ACTGTACGTT TTATTTTATA GAAATCAAGT AGTATCTAAT AGACAAGGGA AGACATTGAT CCATAAACTT TTTAAAGAAA
ATTTGGTAAT CTCTTAAAGT ATTTGTATGG CTTTGAATGG GTGTNCTTTT CTAACTTTGT TTTAATTTTT ATGATACACT
TATAATTGTT TCAAATAGGC ATTTGTNCAT TTTAAAACTA CTAGAAGTTA CACTGAAGAA AAGCATTCAA AAGAAGACTT
TTGGACAAAA AAAATTGTTG AATGAGTGAA ATGCCTGAGG TAGCTCAATT TACCAAACAG GAA

SEQ ID NO:1186: (Length of Sequence = 373 Nucleotides)

GGGGCTCAAG GTGTGCATGT NTGAGGGAAG AGAGAGAGAG AGAAGGCCGC CTCANAGGTG ACTITCAGCC TGCNAGCCTT
CTTCCCGGGG CGCCATAAAC GCCCCCAATT TCCCAGCTGC TAAAGGAAGA GGAAGGTACC TGTNCGTGCA CGCAGACGGG
AAGGGCTGGG GAAGCGGAG GACTGAGAAA AGCCAGATCT TAGCAAAGCA ATGTCTCAAG ATGGTGCTTC TCAGTTCCAA
GAAGTCATTC GGCAAGAGCT AGAATTATCT NTGAAGAAGG AACTAGAAAA AATACTCACC ACAGCATCAT CACATGAATT
TTGAGGCACAN CAAAAAGGGC CTGGGTGGAT TTCGGAAGCT ATTTCATAGA TTT

SEO ID NO:1127: (Length of Sequence = 365 Nucleotides)

FD ID NO:1188: (Length of Sequence = 350 Nucleotides)

ACTATEGET TACATTATT TTAAATTCA CTAAATACAA ATCITEATTE TCATECCAGT TITAGATCTT ATTAATTINC
AGAATEGATA AATTCAAATA ATCATAAATT ACEGTAACIT TITATTATAC CAAGGIGTIC TAATECCATC ATATGANGAC
AGATECTICA AACAACCIEC ATTAAATTAT ATTINNAATA AAATTAAAAT CTATTITTAA CCTATTIGIA GICACAAACC
GAAAACGIGT CENCTITACC TTAGAGCTAA AGECTTACTT TATECCATACE GEATATTTAA TAGICTACAA ATCAAAGGIT
TAAACAENCC CITAAAAAATT CCATATATTC

SEO ID NO:1189: (Length of Sequence = 393 Nucleotides)

GCAAACTINC TCACTICCTC AAAGAAGAGT AGIGCACTAA AAAGAAGGTI GCACCCGGAG AGCATGTAAA GIGTCTCAAG
GGGGACATCT GAAGINCCCC GTTCCCAGGG AGCCCACTGG CTCCTCACAA GTAATCTAAT GAAAGCTATG CATTCTCTCT
GGGCTCCTCA TATGAAAAAN CCCAATGTAT GANGCAAAGC CTAGAAAGGA TTCAATACTG GAGAAATGCA CACAGCTACC
GATAAAGACA GCTCAAAAGT CCTAAGGCTG CTGACATGAA CCAGATAATT GGTGCCTACA GTTGTGCCTG CTAAGATTTG
GGTGCATGGG GCTTCGCTTT GGTTAGCTCC CATGGTCTTC TTTTTCCAAA AAAAAAAAAG AAGNCTTCAG GTT

SEQ ID NO:1190: (Length of Sequence = 365 Nucleotides)

AGIGTAAACA TICACATATT TAATAGTACC TITAAAATAA GCATTACTAC ATTTAAAATG GITCCAAAAT GAATCTATAA ATGGIAATAT AAATTAAAAA ATACGAACTT AAAGTGAATA AATTTITAAC CTTAGCTATG GTATAAATAA TGGIAAATGI ATAGGIACC TNIGAGTCAT TAAAATGICT TAAAAGATAA CAGCTTGITA CCAGAACATT AGANACCATA GCCATGATTC

TCAAGCCEVIA ACAATCTACA TITGVIATTI NCTTGGCCAC TGCATTCTTC AAATGANTAA TAAATTTCCA GAATTCCCAT TCCCATGGIG TITTTCCCAA TAGANCTTTT TCACACTCGA TGTTG

SEO ID NO:1191: (Length of Sequence = 303 Nucleotides)

CCCGGAGAGC TGCCTTCCTC TTCTACCACG TGAGGACACT GCAGGAAGAC AGCTGTCTAA GAACTAGGAA GTGGGCCCTC
ACCAGACATT GAATCTGCGC TCCTTGAACT TGGACTTCCC AGCATCCAGA ACTGTGAGAA ATAAATTCAT GTTATTTATA
AACCAACCTG TCTATGGTAT TINITGTAGC AGCCTGCAGC TCTCTATCAC TCTTGTTTAT AAGAGGCTGA AGTTTACTTT
ACCTCAGGCA GAGCTAAGCA AAAAAGATTA CATCCCGATT ACCAGATGAA AGTAAACAGA ATT

SEO ID NO:1192: (Length of Sequence = 315 Nucleotides)

SEO ID NO:1193: (Length of Sequence = 313 Nucleotides)

CGAATTAGTG AACTGTGCTT CAGGTTCAGG AACCTGGTCT TAGCTCCTTG CCTGCTGAGA TTTTGAGTTA CAAGTAGAAT
TCTCCCAAAAG CAAAACACGT AAAAGTCATT TTNCCACTCT TTTGGTCAAG CACATGTAAG CTTTCAGGAC CAGGTGGTAT
GCCGTTNCTG AAAGTGAGAC ACATGCCCCA GGGAAAGGGT AATTTTAAAA TTCTTCCCAT AGGTCCTCAT CCTGTTCCTC
TGCTATGTCC AGCATCCTTN AGTCCCAGCT GCAGGGCCTA TATTTAAATA CCCTCATGCT TTATCGCTTT TGT

SEQ ID NO:1194: (Length of Sequence = 341 Nucleotides)

GATTTAAAAG CAAGINATIT INAAATCCAC GAAAGATGCC TACCITGGNT CCINCICTGG TCCITATIAG CCACACCICT
CTIGACAGGC AGAGGAGITA GGAGGAGGG GATATITCCCA CCAAGACCCT ACAAATTGCA CICTIAGGCC AIGCCCIGGG
TACCCAAAACT CTAGAATTCC CTCCTCAAAG GGACCITAAC CCAACITCAG AGCCTATATA GGCCAATTCC TIGGTCCATT
TTCCAAGGGG TGGNCAAAGG ACAACCATTT INGGGAGGGN GANGGGAGTA GGATGAAGCT TIGGNCACGT GGGTCTIGGG
CAAATCCCAC ATATCCCGGA A

SEQ ID NO:1195: (Length of Sequence = 239 Nucleotides)

TTATTGATTC TITTTTTGAA ATGGAGTCTC GCTCTGINNC CCAGGCTGGA TTGCAAATINC NOGATCTCAA CCCACTGCAA CCTCCGCCTC CGGGGTTCGA GCGATTCTCC TGCCTCANCC TCCTGAGTAG CTGGGGACTAC AGGTGCGCGC CACCATGCCC AACTAATTTT GGTATTTTTA GAGACAGGGT TTCTCCCATGT TGGTCAGGCT GTTCTCAAGC TCCCAACCTC AGGTGATCA

<u>SEO ID NO:1196:</u> (Length of Sequence = 291 Nucleotides)

CCATGCTTGG CTCAGGGCCT GGGGGGGGT CCTGGGTAGA GTCCTAGCCC CAGAGCCCCA GCCCCTCATG TCCTGCCGCC CCTCACTGAC CAGACGATGA TCGGNAACCT CTTGAGAAAA CATGGCAAAG GATTAGAAAA GGGCAGGGTG AAATTNCCAA GCCACTCAGA CGGAACCCAG ATGATCTTCA ATGCAGCCAA GGAGCTGGGT CAGCTGTCCA AACTCAAAGGT TCACATGGTA CGAGAAGAAG CCAAGAGCTT NACCCCAAAG CAGTGCGCGG TTGTTTGAGT T

SEQ ID NO:1197: (Length of Sequence = 303 Nucleotides)

CTTCATATTT TTATAGCTGG GGTCAAAATA TGCAATTTAA AAATAAATAT ATCCATTTNC CTATTCTTAC ATTTATGAAT ATAAAANTAA AATCTAAGAA ACATAATGCT GCCAACTAAT AGTAGTGGAG GAAAGGAAGC TGAGAGAAAG ATAAATATAT TANTITAATC ATTACTCAGA AAAGGCAGTA AAAGATACTA TCTATAGCAG GCATCAATAA ATATGANCCA TGAGCCAAAT CAGGCTTACC ACCTGATTIT NTAGGATAAA GITCATTGNA AACACAGTTA CAGTGTCTIT CCA

## SEQ ID NO:1198: (Length of Sequence = 318 Nucleotides)

CTCAATTTCT TCTCATCTIT TINATGCTAT TATTGTCATA TAAGTTACAT TCCTATACAT TGTGTGTCCA ACACAAATTT
AAAATTATGC CATTGTCTCT TAAGTCATAG AACAAAAGAG ATACAAACAA AACATACATT TATCCTGTCT TTTATATTTG
CCTATGCAGT TACCTTTACC AGTGTTCCTT ATTTCTNCAT GTGGATCTGA GTTACTGTCT TTNAACTTCA ATCTAAAGNN
CTTTCAGTCT GAAAGACTGT AATTTNAATT TCTNGTAGGG GTAGGTTAAC TAATGATTAA TTCTCAGTAT TCTGAGGA

# SEO ID NO:1199: (Length of Sequence = 326 Nucleotides)

TCTAGTTATT CTGAGAACTA CAACCAAGAA AAGAGGGAAG CACCGGGTTG GCCAAGGCCA TCCGGAGACT TGTCCTGCTG
GGTCATTTAA AAAGCTTTTC TAGGATAACG TTGGCTTTCC AAGTGGTTTT CCAAGCTGAT GTCTTTCCCA CTGAGGAGAA
GCTGTAGGCC TGTGGACTGC CAGGTAGGAG GAGGTTGAGG TTTAGAGGAA AGAGGAGAGC AGGAATGGGT TGTTINCAGT
GGGGCTGTTC CCATGGACTC ACCAAGAAGA AATCGAGGTG CTGATGGGGC TGCACAAGTG CTTATCAGAA ACAGCTGTAA
CAAGTT

# SEO ID NO:1200: (Length of Sequence = 341 Nucleotides)

GGGTGACAGA GTGAGACTCA GTCTCGCTGA AAAAAACAAC AACATTGCTT TACAGTGTGA TTCCAGTTAC AGAGAATATT
CACATAGGTG CATAAATAAA TGAAAAAAATT ATTGGTTAAT GTCTCTGTAT GTTGGGATTC TCAGTGATTT TNTTTTNCTA
CTTTTNATTT TTNATAATTC CTCCAGTGTG TTGGTGTTAG CTTTATAGAT TATATCAAGT AACCTTTTGC TGCACCAAAA
AACCCCCCAA ATCTAGTGGA TTAAAACAAA ACCATCTTAC AATTTINNTC AGAACTGTCT AAGGCTGGAT ATTTTACTGG
GCTCTCTCCT GAATGTGGGG G

# SEO ID NO:1201: (Length of Sequence = 312 Nucleotides)

GTCTTTNITA CCCTGCTAGC AATAGCTCTC AGTTTCAGAG GCACAGTCTT TGGAGACCAT TCAGCACTGA GAAAGCAATA
TTTAGAACCT ATTGCAAAAC TGGGCCTGAG TTAGGCATGG TGATGAATGC ATCAGCAAGG AATAGAAAGT NCTTATCGTG
AAACCCTTCA ACCTCAACTA TGCCTTCATA GACACCACG TTCATGCACA TGTAGGCACA TGTACCATCT CACATCTTTC
ACTTTCCCGA GATGCCATAT ACAATTACCT ACATTAATAN CTGTAGGCACT ATACCTTTTT GAGCCCGAGA GA

## SEO ID NO:1202: (Length of Sequence = 344 Nucleotides)

GGAAAATAGC CAGACIGGGT ATTATGCATG TAACAAATGA GGACATTGIG CATAAGAAAG GAAACATTAG TITICIGTCA TCCTGGGCCA AGTACCTCAT TACAGTAAAT GIGIGICTIT GGAAACICTI TGCTIGINCT GATGGCGGTA AGCATGGGGT CCCAGGCAGG TICAAAGGCT GAACIGTAAG AAATGGGCAA GACAATACAT TITIGTITTIGG AAGGAATTIC TCAAGAAAGGT AGTITCCCAA AGCITGAATT ACAGGCTATG AAATAAAGCA AATAGATGGA GGAGAAAACA AGTIATIGTIT TCAAAAAAGGT ACCAAGTCAA TICTIATTTAA AGGA

# SEQ ID NO:1203: (Length of Sequence = 370 Nucleotides)

GTTCTTATC TTCCTCCTCT TATGTGCACT ATGTAATGTC CTCATCATTT TAAAAGTGAG TTGCTATTGG GCGGCGCGG TGGCTCACGC CTGTAATCCC AGAACTTTGG GAGGCCAAGG TTGGTGGCTC ACTTGAGGTC AGGAGTTCAA GACCAGCCTG GTCAACATGG TGAAACCCAG TCTCTACAAA AAACACACAC AAAAAATTAG CTAGGCATGG TGGCACACAC CTGTAATCCC AGCTACTCGG GAGGCTGAGG CACGAGAATT GCTTGAACCC ACGGAGGCGG AGGGTTNCAG TGAGCCCAAG ATCGTGCCAC TGCACTCCAA GCTTTGGGGT GACCAGAANC GAGACTTTCT CAAAACAAAA

SEQ ID NO:1204: (Length of Sequence = 346 Nucleotides)

CTCTITAGAA AGCCTGCCTT GGCTGGGCCT GGTGGCTCAC CTCTAATCCC AGCACTTTGG GAGGCCAAGG TGGGAGGATT
GCTTGAGCCC AGGAATTINA GACTAGCTGG GGCAGTGTAG TGAGACTTTG TCTCTACCAG AAAAACCGGG CGTGGTGGCG
CATGCCTGTA GTCCCAGCTA CTTGGGAAGC TGAGGCAGGA GGGTTTGCTT GAGCCCGGGA CGTGGAGGTG GCAGTAAGCT
GTAATTGTGC CACTGTACTC CAGNCTGGGT GATAGAGTGA GACCCTGTAT CAAAACAAAA CAAAAAACAA AAACCTGCCT
TCTNGGGATT GGGCTTCTGG GTTTTT

SEO ID NO:1205: (Length of Sequence = 292 Nucleotides)

SEO ID NO:1206: (Length of Sequence = 336 Nucleotides)

SEQ ID NO:1207: (Length of Sequence = 319 Nucleotides)

TECCTCANCE TECAGAGTAA CIGGGATTAE AGGCGCCCGE CGCCACGCCT GGCTAATTIT TGTATTTITA GTAGAGATGG
GATTTINCCA TGTTGGCCAG GCTGGTCTCC AACTCTTGAT CTCAGGTGAT CCACCTGCCA CAGCCTCCCA AAGTGCTGGG
ATTACAGGCA TGAGCCACTG CGCCTGCCTC CATTTCCTTT TTATAATTCA TCCCTGAACT CCCTTAAGGT AGAGAAGCTG
TTTGATCGTC CCAGCCCCTG GGAGGCTGAA AGGTAACTTN ACCAGCTCCA TGCCTGAGTT TAGCACCTGC TGTGCCAGG

SEO ID NO:1208: (Length of Sequence = 357 Nucleotides)

GAGATGITTA AAAATGAAGI GGAAGITTIT TGITTITGIT TIGITTITGC AGAAAAAAGA TTITTAATGG CITGAATGIN
CIGCCATAGI TGCGICAGAT TGICAGAAAA TTATGITGIA CATCIGAGGA AGAAAAGAAG AGCCTITIGA GGAGCIGCGC
TAAAATTATI TITTGITTAG TCICTTAACT CITTGGCITG AATGAGICAT TGACTITCCT TGCCAAGATA GGGITAGCAT
TTGITTITGIG TITTAAAAGC AGGCCAAGGG ATTGCCACGA GGGGAGACAA CCTGAGCAAC TGAAGGAAGG AATTICTAGA
AATTGIGITT ACCAGITGIT TIAGICTGAA TGIGATT

SEO ID NO:1209: (Length of Sequence = 362 Nucleotides)

CCCATCTGCT CCACCCAAAG AAATCAGACA AAGTAAAATT TATTGAGACA GACAGAAATG CACCTACTCA GGACTACAGT
TAAGCATTTA CTATTAACCA AAGAGTIGIG TICACATTCC AGATAAGTCT ACGTGGAAAA GCATTCAGAA TITACTAGGT
TITTINCTACA TCACTATTTC ATCTACAATA GGGACAACAA ACTGACACTC AGGATTTGAT GGGCTCTCAT TACAATGCTA
TACATTTAAC AGGGNCAAAC ATCAGTGACT TIGAGGAAAA AGTTATAAAA NGACCAAAAAC CACCCACTGT AGGATGGGCT
CTTGGATGTT ACTGTACAGC GTGGGTCAAG GTAACAAGGA GG

SEO ID NO:1210: (Length of Sequence = 349 Nucleotides)

GAGAAGATAG TAGAGAAAGT CAGCGTTACA CAAAGGAGAA CCAGGAGAGC TGCCTCTTTT GCCGCAGCTA CCACITCCCC
TACTCCCAGA ACTACAAGAG GTCGTAGGAA GAGTGTAGAG CCACCTAAGC GTAAGAAGCG GGCCACAAAG GAGCCCAAAG
CACCAGTCCA GAAAGCTAAG TGTGAAGAGA AAGAGACTCT GACCTGTGAG AAGTGCCCCA GGGTATTTAA CACTCGCTGG
TACCTGGAGA AGCACATGAA CGITACTCAT AGGCGCATGC AGATTTGTGA TAAATGTGGC AAGAAGTTTT TCCTGGGAAG
TGAGCTGTCC CTTCACCAGC AAACAGACT

# SEQ ID NO:1211: (Length of Sequence = 344 Nucleotides)

TTTTTTTTT TTTTTCAGG GAAGAGCTT ATTGCTTCCA TGGGGGTGGC CTGGGACGGC TGCCACAGCT TGGGTAAGCT CCTTGGGCAGT CANTTCCCTT TGGTCAGGC TAAAGGCAGA ACCCAACCAC CTGGCAGTNT TGTTGCTGAA ACCTAGAACA TGTGGCAAGT TGGTGAGTCC GGGCCTGCGG TAGTCCTATG GNTCAGCTGC AGCTGTGGAG GGGAGCTCTT CCCAGCAGGC GGANTGGGCG TCACCCTCCT GAGCTTTAAA GTTCTTTCTG CTATAGCCCT GGGGCGGTCT TGTTGGCTCC GAAGGAATGG GCTCCAGGGT TTCCCCATGG GACA

# SEO ID NO:1212: (Length of Sequence = 364 Nucleotides)

AAAGAAAACC TGGTATTTC ACCATCCTCT CTGAAAATAA ATACTTGAC TIGCACTGAT TACTACTTCA TCAGCATTCA
ACTCCGCTCC GTGGCACTCT GTGTGAATAA TTTTAAAGGC AGATTAAGCA TTCTAAAAAT AAATTCTATT GGTAAATTAG
GATATCAGAT GCTTCCATTA TAAAAGCCTA TCCTATTCTG TACTCTCAGC TGGCAGTCAT ATCCAGATCT CAAGCTACTC
TGGCTCTTAT TGAACAAGAA CCTATTCCAG GGNGTGAGGT TTTGAAGAGG GGATCTCTCA TGGTTAACTA GAGNCAGGAA
GAGGCAGAAT TGCCCACATA CTCTNGCAGG AGTTAAATAA CAAT

# SEQ ID NO:1213: (Length of Sequence = 302 Nucleotides)

CTAATTITIG TATTITTAGI AGAGACGAG TICTACCATG TIGGCCAGGC TAGITTCAAA CICCIGACCI CGGATGATCC ACCCGCCTCG GCCICCCAAA GIGITGGGAT TATAGGCATG AGCCACTGTG CCCGGITACT TITTCCITTI TIAAAACACT GAAATTGCTG TATCTACCAC ATTAACATTI TATTTAAAAA AATTTGITAA ATAGCATATG TATGTAAATT TAATATTAAT ATACCICTTI TITTGICCTI CTTTAGGTGG TIGGAGCCTA GGGATACTTA CITACTGATT TI

# SEO ID NO:1214: (Length of Sequence = 317 Nucleotides)

CTAATITINC AGACAGGITT ACATGIAAAA GGCTAGGIAT TIAGCCACCI CAGCATIGAT TAGITITGGA TGICTAAGCT
CTGITACACA TGGCTTCCCA TGGCTTCACT CTACAAAACA TATTINCAAC GTGAAGGNIA CATCTACAAG AAATCIACAT
TTCAAGGGIT TIACAAATCA ATCITGTATC TTTCCCCTGA ATTGACTCTC ACAGACCCCG TCCCCTTGIN ATTNCCTTTG
CCCAGCTTAA CGGTCCAAAG TCTACTTAAA TGCAGCTCAA AAATGITAAG ATTGGGCAAC AGATTTACAG TTCCTGT

# SEQ ID NO:1215: (Length of Sequence = 276 Nucleotides)

ATAAGGIATT AAACAACTAT TCTTGTACTT GANITAAAAA AAAATCAAGC TGGGTGCAAT TGCTCATGGC TGTAATCCCA
ACACTITGCT AGGGTTAAGT GAGAGGTTCA GCCCAGAAGT TCAGTACCAG CCTGGGCAAT ATAGTGAGAC CCCTTCTCTA
CAAAAAAAAAT GAAGAAATTA GCTGGGTATG GTTGCATGTN CTGTGGNCCC AGCTCCTCGG GAGGCTGAGG CTGGAGGNTC
ACTTGGGCCC AGAAGGTCAA GGCTÁCAGTG AACCTT

# SEO ID NO:1216: (Length of Sequence = 354 Nucleotides)

GCATAGGCAG CCCCTGCTCT TGCATTTACC TCCCACGTGA ACTAGCTGCT CAGTCATTGC TCTGGAATAT GGAGTTGTGA
TCTAGAAATT AAAGATGGGA TTAGGTAACC AGTGAGGTCC CTTCTACTGC CAGTGTATGA CTCTCTTCTT TGTAAATGTC
ATATGTAGGG TTCTGTACAC AGGACATTTT CTTCATTGTA GTTCCTCAGA TGCATTGAGC TCTCCTGAAT GACTTAGCGG

GGAAGCTCAG TTGCAGCTGA COGTATTAAG GGTCCTCTCC CATTGTGCTG TGCCCGCTCG TTAGCGTAGG ATTCNTGCCC CACGGCCCTT CCTGTTTTCT AAGGGCTTGG CTTT

## SEO ID NO:1217: (Length of Sequence = 272 Nucleotides)

CTTCCCAGCT TITGCTGIT GIAAACAGCT GGCAGIGGIT ACATCIATAT TIGITAAGAG GCAGAGCACT GIATITIGIG
TAAGATAAGG TGCIAGICIT GGCCAGGCIG CCAAGCIGGG GCINITTAAA ATAAAAGITT TAAAGAAAAA TIATAGCATA
ATAAATIACA CAATTITATI GGAAAACIGA AGGIGITCAA CCAATGCIAG TITITAAATA TATITAGAAA TACIATITCA
GGAAATTITA ACIACACICA TIAGICITAT GG

# SEO ID NO:1218: (Length of Sequence = 281 Nucleotides)

GTTGCCCAGG CTGCAGTGCA CTTGTGCAAA CGCGGCTCAC TGCAGCCCCA ATCTCCCACT CTTAAGCAAT CCTCCCACCT CAGCCTCCTG AATAGCTGGG ATTACAGGTG TGCACTGCCA CACCCAGCTA ATTACTTTAA TTTGTTTTAT TTTTAGTAGA GATGGAGTTT CGCTATGTTG TAAAGGCTGG TCTGGAACTG CTGGCCTCAA GCGATCCTCC CGCCTTGGCC TCTCAAACTG CTGGGGTTAC AGACGTGAGC CACCATGCCT GGGCCTGCTC A

## SEO ID NO:1219: (Length of Sequence = 231 Nucleotides)

GTCTTCTCTC CCTCCTTCCC TTTATTGGCA CTGCCCGGAA CCAGGCAGCC AGCAGGGGAT GGGATCAGGA TGCAGTTGTC
ATGGAAACGG TTGGGGATCC ACAGGAACGA CATTCATACA GGGACATTIN TGAAAGCAAA GCAAGAATGA NTGCTTTCCC
GATCTCAGAC TGGCTGGATT CAGATCATTG TTTTGGCTGG TTCTCATTTT AAGGGGTAAG CAGTTTGCTA T

### SEO ID NO:1220: (Length of Sequence = 409 Nucleotides)

AGICACTCAG AAACTTACTT TGCTTACAGC CTCATTATTG TTTTTTGTAT TTGTTAAGAT ATTCCGTGTG ATGACATATT
TTGCCTTAAA TTTNCTAATT TTCCTGGCCA TTGCTTTCCT GTGATTTGAA AATGTTACGG TAAGTGCTTA GTTTGGAAAC
TATACTGTCA ACATATATTG CATTACTTCA GCAGAGCTGT AGTTCCATAA CATAATAAAA TGATGCTTTT TTTTAATAAGA
AGATCATACA CATTTCATTA TGCCCTAAAA GATGAACATT CAAAGTTCAC TTTTCTCTTG TTTTGATATG ACGGATATAT
ATCAGTAAAA TAAAAAATGC TGCAGNACCA ATATGCACTA ACTCAAACAT GCTGTGGATT TGTAGGGGCA CTGAGGTAGC
AATGTCAAG

## SEO\_ID\_NO:1221: (Length of Sequence = 396 Nucleotides)

ATCIGAGATA CITIGICCIC AIGAATAAAT TAGITAGIAG AATCIAATIT CIAGATCCIT CATAATGGIA ATIGAGGGIA AAAAATAATA AIGIAGIAGI CAATTITAGC CCITITAAACC TATGGGGAAC TGIATGAATA ACIGITIGAA ACIGCAGGGI AATCCIGICA CACTIGCAAA CACATAGAAG CAACAAGACT ATTTCCICTC ACACTITTAA TIAAAATAGI GCCTGAGIAG ACITICCAGGG TAAGGITCAG AAATTINCTT TCIAATTTCC CIGITITIAAT GACCACTACT TITAAAGCIA TGCTGGGAAT TCACTITCAC ATATATCIAA CITACAGGAA ATTITTGAAG AGCCTAAATG TCTATGGGIA GATTCAATGI TICCIT

# SEO ID NO:1222: (Length of Sequence = 350 Nucleotides)

GIATTINITI CIGGGIACIC TICATGGCCI GCIAGAGAAC TITACIAAAT TATAGICCAG TAGCIGGACA GAGCIGCATG
TGIATTGTCT AAGTCCACCI GIGCIGCIGG TCAAGATTAT TITGCAGIGT TIGGIGGIGT TGAAGAGGAA TACIGITIGIG
AAGGCIGAGT CAACIGCATG ACAAINCICA TGGCICACIG GCIGATGAGT TGIGGCATGA CIAGAAAGCI CIGCITGIAT
TCCCAGATGA CAAGTCACAC CIGAACAGCI GGATACIACI CGCATCCAAT TIGCTTCCAA GITAACATAT TINCAGAAAA
TATTIGGATT TGGAGTACAT ACAAATATTT

SEQ ID NO:1223: (Length of Sequence = 370 Nucleotides)

ATAAGCATAT GANTITATCT ATAGGCCAAG TTAATGACAT AACTACAAAG AAATGACTTG TTTCACATGT TTTAAACCAG
TGTTTTGGCT ATACTAACTT AGTGAGACAT ATTCTAAAGA AAAATAGAGA CGCAAAGAAG ATCTTACACT TTAATAGTCA
ATTTTGTAGT TGTAATATTA CTATCGATCA TTTTGTAACT CTCCTATATA GGGTGTAGGA TGGTGGAAAT AAGTAATTTT
MTTAATGTTG TTAGGAACCA AGGCTATCAG TGTAAAATGA AGGAGTTACA AGCATAAGAT TGANAGACGG TAAGTAAAAA
GCTCATTAGT ATAGTTCCAA GTTTAACTTG TCAGGGATGA GCTCATGATT

SEQ ID NO:1224: (Length of Sequence = 188 Nucleotides)

ACATGACCNA GGCCTGACCA AATCAGACTA AATCCTANTA CCTATACCAG AGTTATTGAG AAAGATAAGN TTTGGCCTGC NGGCCTTTGA CAGTGAAAGG MINTAGGCTT TGGAGCTCCT CAGGGCCACT GCTTCAGGGA ACCTTGCTGA CAGTGAAGCC AACACAGATG AAAGCAAGGC CAAACATT

SEQ ID NO:1225: (Length of Sequence = 353 Nucleotides)

CCCCAGCCAA GGGAGCCAGT NAGTNAGTGT GGTACCCAGC GTGGGAAACC GTGCTTTTTIN CCATGGNACT NTGCAACCCA
CGGATTAGAA GATCCCACTC AGGAACCCAC GNCACTGGNA CCTAGAATGC CAACCCCAGA GCTGCACAGA TTCTAAACAA
CCTCTCANCT GGAATCTGCC TAACCCTGCA GAGCTCCTGC GGGGAGGGGT GACCAGTGCC ACANCTGCTG CTGCCTGCTG
CCTAAGCCAT TTAA

CAAAAAGITA G.L.AAACATG TAAACGTAAG TNATGAGGTA TTTCATAGAT ACAGTGCCCA TACAAATNCT CTTTCCCACA
ATTTTCAACT GCCAGATCTC TTGCTTTAGT CTTTTNCCT TATATTTGGA GAAACAGAAG AGITTGACAT AAAAGTCCCT
TTGAGGATGT GAGGGTTGCA GTAGTTTACA GCAGGGTCAG AAAATGAAAG TAATAAAGCA ATATTTACAT GTTTTTGTAT
AAGACCAAAA ATATTTCCTT AAAAAGTTGT TAAAAGTTTT TTAGTCCTAT AAACACTCAC TTTTATAGGG CACATGATTG
TCTGTGTGAC TTCTCTTTCC AGAGGAGGAC TTT

SEQ ID NO:1227: (Length of Sequence = 352 Nucleotides)

GECATCIEIT TITITETTIE TITITEAGATA GAGICICACT CIGICGCCAG GCIGGAGIGC AGIGGCGIGA TCICGGCICA
CIGCAATCIT TECCICCCGG GITCAAGCGA TICICCIGCC TCAGCCICCC AAGIAGCIGG GAGGIGIGCA CGCCACCACA
CCCCGGIAAT TITIMITATIT TITIGIAGAGA TGGGGITICA CCATATIGGC AAGGATGGIC TCAATITCCI GCGCTIGIGA
ATCCGCCCGC CICAGCCICC CCAAGIGCIG GGATTCCAGG CGIGACCACG GCGCCCGGCC GGNATCIGIA GATTITAAAA
GGCCCCAGIG GITCINATGC ACACCCCCAG AG

SEO ID NO:1228: (Length of Sequence = 387 Nucleotides)

AGTITICCAA GAITGAGIGA CACTATIGIA ATGAGAATCI TCACTGGAGC ATCAGAAGAA CIGATITCAA GCCAGTITIG
TIGGICAGCA CGGICAAAAC TICAGAAGAA TCITGIGCIC TGAGGCTITC CAAAGCTITG TICCCCAGGG CAGTAACAGC
TICCAGIGIT GGCAGAGICT TIAGIATIAT CACCAGGGCA GCTGCACTGI GGCCTGIAGC CATCITICIC TITTAGIACG
ATCCCACCIG TCAGACTICI TGAATITGCA CTICAAATTA GAGCCACAAT CAAATTATCA GTCACGNIGI TIATITTTIGI
CACCAGAGAA AGGACAGAGI CTGTITCAGC AGAGTTIGGA GCCAGGTACT GATCTCTCTT CAGCAGG

SEO ID NO:1229: (Length of Sequence = 366 Nucleotides)

CTEATAAGGA GGTAATTICA TAGGAGCTGC TAAGATGGGC ATGAGGNICA AACTGCAAAG CACCAACCAC CCCAACAACC
TGCTGAAGGA ACTCAACAAG TGCCGGCTCT CAGAGACCAT GTGCGACGTC ACCATTGTGG TGGGGAGCCG CTCCTTCCCG
GCCCACAAGG CTGTGCTGGC CTGTGCAGCT GGCTACTTCC AGAACCTCTT CCTGAATACT GGGCTTGATG CTGCCAGGAC
CTATGTGGTG GACTTCATCA CCCCTGCCAA CTTTNAGAAG GTTCTGAGCT TTGTCTACAC TTCAGAACTC TTCACAGACC
TGATCAATGT TGGGGTCATC TACGAGGTAG CTGAGCGTCT GGGTAT

SEO ID NO:1230: (Length of Sequence = 343 Nucleotides)

AGTGGAGAGA AGCCCTATGA ATGITITGAG TGTGGGAAAT CGTTTTGCTG GAGCACAAAC CTCATTCGAC ATGCCATTAT
CCACACTGGA GAGAAGCCCT ATAAATGIAG TGAATGIGGA AAGGCCTTCA GTCGCAGCTC GTCCCTCACT CAGCATCAAA
GGATGCATAC TGGGAAAAAAT CCCATCAGTG TAACAGATGT GGGAAGACCT TTTACAAGTG GACAAACCTC AGTTACCCTT
CGAGAACTIN TTTTAGGGAA GGACTITTTG AATGIAACCA CTGAGGCAAA TATTTTTCCA GAGGNAACAT CTTCCTCTGC
ATCTGATCAA CCATACCAAA GAG

SEO ID NO:1231: (Length of Sequence = 406 Nucleotides)

CICTOGCOGG GCAGCITIGGA GAAGGOGCAA TACTICICCAG CICCACCGIT ACTICAGCAT GGCIGGGGAG GCCITIGGAAA ACTITATAATC ATGGIGGAAG AGGAAGCAAA CATGICCTIC TICACATGAC GGCAGGAAGG AGAAGTGCIG AGCAAAGGGA GGAAAGCCCC TITATAAAAACC AITAGATCIT GIGAGAACTC ACIATCATGA GAACAGCATG AAGGIAACCG CCCCATGATT AANITACCIC CCATGGGCIC CCICCCGCAA GACGIGGAGA TITATGGAAAC TACAACTCAA GATGAGATIT NGGIGGGGAC AITAGGCAAAC CATATCAATG TACATGTGIC TITATGGTAG AATGATTTAT ATTACTITAG GTATATAGCC AGTATTGGGA ATTGCT

SEQ ID NO:1232: (Length of Sequence = 380 Nucleotides)

AGACCATCAA AGGCCCAGAG GAGAGACTCT TGGGACAAAT AAATATTTAA AAGCAGTTGC CTATGAGAAA ATGGAAAAAG
CCACAAGCAA AGGTAAGATC CATGCTCCAA AAAGGCCTGA GAAAATCTTA AACCTTCTCC TCAGATTGAT CCCAAAGCTT
AGAACGAATA CCAAGATAAT AGCAAAAATC CTCCCTGGAA AAGAGTCAGT CTGCAAAAAAC CGGAAAAAGGA GGTTGTTTTT
TCCACAATGC CTAATTTCTA ACAACAACAA CAAAAACTCA GAAAACTGG CCCAATAAGT GGAAGAAAAT AAAGTGACGG
AAACCTTCCC CGGAGGAAAC ATAAGCTTCA GGCAAACTAG ACAGATTTTA GACTGTCTAA

SEQ ID NO:1233: (Length of Sequence = 357 Nucleotides)

TTCAAAGITT ATCACAACCA CCACCATCAA GACAGCAAAC CAAAGGGGCA TGGIAAAAGA AAGITCCAGT GACTCIGGAT TTGGITCTAA TTTTAATGCA ACTTCTTGAT TGAGTGCAGG GTCAGCACTA CTTCGAAGTG GCTTTGGCGT TTCANCGGTG GGIAATGGGA ACATTGCCAA ATTTATATTC TGIAATTTTN CGTTGGGTGA GGGGAGCATT ACATCATTAT ATAATGGTAC TTCCTCAAGT TGCTGGTCAT CAGTTTCTGT GTCGTTGCTG CCAAAATCTA AAGATATGAT TGTNTCTCCA GCGGCTGGGG CCAGCAAAGT TAAAGCATCA GGTTCCTTCT TAAGTTT

SEO ID NO:1234: (Length of Sequence = 313 Nucleotides)

CCAAGAAATC TTAATINCIT TATIGITIGA CITITIGACT CAACAATTIT TITAAAACTI TITGITTITI NCIGAAACGI TCTIGITGIT ATGAGCCITI TGITTIGINC TCGITAAATG CACICGACCC AAAATTGGIT TGGCATATCG AAAAGGAGCA CAAGGAGGGA GGGCTGGGG CGIGGGAGGT GGGGAGGAGG CCCGAATGGA CAGAAAGTTG AGGATAAGAG AAGAGGAACA TAGAGACAGC CAGAAAGACA TGGGGAAAGA GTGTTGGAGA CAGAGAAAGG GGAAAGCCAA AAG

SEO ID NO:1235: (Length of Sequence = 386 Nucleotides)

CTCTCTCAGC ACAGCTIGGG GAGGGGGTCA TIGINCTCCT CGTCCATCAG GGATCTCAGA GGCTCAGAGA CTGCAAGCTG CTTGCCCAAG TCACACAGCT AGTGAAGACC AGAGCAGTTT CATCTGGTTG TGACTCTAAG CTCAGTGCTC TCTCCACTAC CCCACACCAG CCTTGGTGCC ACCAAAAGTG CTCCCCAAAA GGAAGGAGAA TGGCAGCCTC CACATCTCGG GTTCAAGTGA TTATCCTGCC TCAGCCTCCA AGTAGCTGGG ATTGCAGGTG TGCACCACCA TGCCTGGGTA ATTTTTGTAT TTTTAGTAGA CACGGTTTCA CCATGTTGGC CAGGCTGGTC TGGAACTTCT GAGTGTAAAT GATCTGCCCA CCTTTG

#### SEO ID NO:1236: (Length of Sequence = 401 Nucleotides)

## SEQ ID NO:1237: (Length of Sequence = 372 Nucleotides)

TTAACTCTTT CINTICTICA GICGGATTAT AGAGITGGAG CAAATGTCAT GATGANCTIT NAGGCCTAGG CCTGGNCTCT
TGAGGIGIGT GIG.GIGIGT GIGIGIGIGT TICTITCTCC ATAATAGTCC CAACCCTAAA CAGGGGTATG
GCACAGIACT TCTTATGAAC AAAAGIGCTA TIGGICTACA AGGGGACTIG AGCCTGCACT AATIGIATIT GATTAGGATT
TTTGIGCTGT CIGTATGATG TITAACCACA CIGTCAATTA CAGACTICCT TTAAGGAATT TCCAGGAAAC CCCCTTACCA
TAAGAGITTA AATTAATAGT TINCTAGTIT AATGACAGCA GIIGGIAAAG GA

### SEO ID NO:1238: (Length of Sequence = 304 Nucleotides)

GGACAAAATT CCAATTATTG TAAATGTAAA AGAAAAGACA ACAAAAATAA GCTAGAAAGA TGAAAGCTAA AAATTCTATT
TGAACTATGT AAGATGATGA CAGATATTAA ACAGTAATTA GTCATGAAAC AATCATTTAA ATGCTTTTTC CAGGGGAACT
GCAGAAGTTG AGACCCTCAA AGAGCATGCA AGCTAGTAGG GAGGCTGCGA CTCATACCTT TGAATCTTTC TGTTCTGCAA
ATTCTCAACT CTTACCAATT TAACTCTGCA GTACTGCTAT GGAAATTACA TAAGAGTAAA TTGG

#### SEQ ID NO:1239: (Length of Sequence = 389 Nucleotides)

TGITATAACT GGCACITTAA TITGITTITG GAACTAGAAT TTAGGGGCAG TTGGATGAAA TTGCAAATIT AGAAGGGGAA
TAAGAATTTC CTAGTGCTAT ATAAAGAAAT GATGATGGAG ACAAAAGCCT TGCTTTCCTC TTTTTAGAAT TTATTTNCGA
TTTTNAGCAT ACTGTGGGGC TTTTAGAGCT AATATGATCT AAATNCAGAA AATTTAATTT TCATAGTAGG CCAGGTGTGA
ATTACTTATG TTTGCTATAG AATGCTTATT TAGACTAACA ATAAATTTAC TTTGCTTTCT AAGGCCAGTC AGCGAATGTG
GGGATGAGGC AGGATGTTT AAATGAGCCA GAGATGATCC NCAAGGGGAA CAGTCGACAC AGAGGTCTT

# SEO ID NO:1240: (Length of Sequence = 365 Nucleotides)

CTCCAGCCTG GGCGACAGAG CAAGACTCCG TCTCAAAAAA AAAAGCCTTC CTTGCCAGGT GAAAGCAAGA GTGGTATGGA
ACATTIATIT AAACATAAGA AGCAGAAGGT TCCTCCTCTT GCAAGTATGT TTTCTCTAAA TGTAGCATTT CCACTGGAGG
AGGTGGTCTG GGTGGATGGT TAATATGTGA GGATTGTNCA GCCAGGCAGA TAACCAGGCC TCTGCATATA CAGATACCCA
CAGCCCAGGA ATCTTGAGAA CTGAATGGCC CATAACAACC TCTGGCACTA TCGGAGCTGC AGGGAGGCTT GGCTGGGGCT
ACTCCAGTCT CAGGCCCCTG TTTTTAGCGG GAAGTCACAA GGAGG

SEO ID NO:1241: (Length of Sequence = 350 Nucleotides)

GGGGAGGCGG TAGGGTCTGC NCTGTCTGTN AGGGGCTTGT GGCTTGGCGG GTGGGCTTTG CATGGTCTCG CCTCTTGAGT
CCAGCCCCGT CCTGATGGGG CAGACTTCTG TNCGTNCTGC TTCCTGGGTG ATGTCAATAC TGAATGAGAG GGCAAGAGAA
GGGGAAAGGG AACCGCCCAT ATGTNCTTCA CGTGCTGCAA GGGGGCTGTN TGGTTCCCAT GAAATGGTCA GCAGAGACTT
TGGGATGGGT ATGACTCGTG GGTCACAGGG TTGACTAGAC AGAATCTAAA GAAGGTGGGT GCTTAGCTNG GAAGTCTTCA
GTAGGAACGG ATCACTGTGA AGCTCTAGGG

SEO ID NO:1242: (Length of Sequence = 392 Nucleotides)

CTCTTACGAG TGAGGITAAG TATTGAACAG ATATTTAAAA GCTATAAGCT TTTAAACAGA ATAGGCATAT TGCTGATACC
AGTATTTGAC AACCGCCTTG TTTTTTCAGA TAAGAAAACT GAAGCACAGA GACCATAAGG CATCAGCCTA TGGTCATTCA
CTTCGTGGTA GTCAGGTCGG AGGTCACACC AAGGCCCTCT GGCTACTGAT AATCTCTGTA CTAGGCTGCT TTTCAGTAAA
CTCTTGAATG AATGAAAGAA AGAACACATA CTGTTGACTT TTGAACTTGA ATCTAAACAA AACCTATGTT GAACTTTAAG
TCTGTAATCT AAGAACTATC AAACTTAAAC TTGTTACAAA AGGNGGTGAT GAGCACAACC ACTTTCTTTT GG

SEO ID NO:1243: (Length of Sequence = 377 Nucleotides)

GIGGGGCAGG CGTGAGGTAG GGGTGGGGTG GGGATGACAG TCAACACAGC TTGGACCAGA AGCCCATGGC GCCTGGNTCC
CTGGAAAGGC ACAGGCCACA GACGGATGCC GCCTTTNITG CTGGGACACT CCTGCCACCA TCCACAGCTC CCCCGTCACT
CCACGTTCTT GTACTTGGTG AACAGGTTGT AAAGAACCCT CAGGGTGGAT TTNAGGTCCA AGTTAACCAC GTCTTCAGGA
CGAGCCTTGG GTTTNTINAG GCCTCCGTCC AGCATCAGCT CAAAGGCGAA GGACACATIN TGGACCTTCT GATCGAAGCT
TTCCGGGAGTC AGGTAGAAGT GGTGGAGAGG AACAAAGTAG TCTTCCAGAA GGCCCAT

SEQ ID NO:1244: (Length of Sequence = 312 Nucleotides)

ATTITINCAT CAATGITCAT CAAGGATATI GGICTAAAAT NCICTITITC AGITGGGICT CIGCCAGGCI TIGGIATCAG
GATGATGCIG GCCTCATAAA ATGAGITAGG GAGGATTCCC TCITITNCTA TIGATTGGAA TAGTITCAGA AGGAATGGIA
CCAGCICCIC CITGIACCTC TGGIAGAATI CGGCTGIGAA TCCATCTGGI CCTGGACTIT TTITTCGITG GIAAGCTAIT
GATTATTGCC TCAATTTCAG AGCCTGITGI AGGICTATIC AGAGATTCAA CITCITCCTG TTITTAGICTI GG

SEO ID NO:1245: (Length of Sequence = 320 Nucleotides)

GGAGATCGTG CACATCCAGG CCGGCCAGTG CGGCAACCAG ATCGGGGCCA AGTTCTGGGA AGTCATCAGT GATGAGCATG
GCATCGACCC CAGCGGCAAC TACGTGGGCG ACTCGGACTT GCAGCTGGAG CGGATCAGGG TCTACTACAA CGAGGCCTCT
TCTCACAAGT ACGTGCCTCG AGCCATTCTG GTGGACCTGG AACCCGGAAC CATGGACAGT GTCCGCTCAG GGGCCTTTGG
ACATCTCTTC AGGCCTGACA ATTTCATCTT TGGTCAGAGT NGGGCCGCA ACAACTGGGC CAAGGGTCAC TACACGGAGG

SEO ID NO:1246: (Length of Sequence = 275 Nucleotides)

TTTTTTTTT TTTTTTTTT ATCTGACAGC AATAGATTTA TTAAGTATCC CCGAAAATAT AAACACAAAC CAGTAAAAAAA CAAAACCGTA AAACGTCAGG CCTGGAGCTG CAATAAGACA GAGACAGGAG CAGCTCACAC GTGGCCTAGG TGGGGAGGAC GAGGCCCATAA ATACTGCAGG AGGGCGCAA GGGAGCCCTA GGGCGAGGGG AAAGCAGGGT NTCGGCAGCG AGATGGCTCC GGGGGTTTAG ACACTGCTGG CTTCGGCCCC GGCCG

SEO ID NO:1247: (Length of Sequence = 384 Nucleotides)

GGTCTTGCCG GAGAAGTACC CCCCTCCAAC CGAACTTTTG GACCTGCAGC CCTTGCCCGT MTCTGCTCTG AGAAACAGTG
CCTTTNAGAG TCTTTACCAA GATAAATTTC CTTTCTTCAA TCCCATCCAG ACCCAGGTGT TTAACACTGT ATACAACAGT
GACGACAACG TGTTTGTGGG GGCCCCCCACG GGCAGCGGGA AGACTATTTG TGCAGAGTTT GCCATCCTGC GAATGCTNGC
TGCAGAGCTC GGAGGGNCGC TGTGTGTACA TCACCCCCAT GGAGGCCCTG GCAGAGCAAG GTATACATGG ACTGGTACGA
GAAGTTNCAG GACAGGNTCA ACAAGAAGGT GGTACTNCTG GACAGNCGAG ACCAGCACAG ACCT

## SEO ID NO:1248: (Length of Sequence = 225 Nucleotides)

AATTTGGAGA AGATAGAAGT TTGAAGTGGA AAACTGGAAG ACAGAAGCAC GGGAAGGCGA AGAAAAGAAT AGAGAAGATA GGGAAATTAG AAGATAAAAA CATACTITTA GAAGAAAAAA GATAAATTTA AACCTGAAAA GTAGGAAGCA GAAGAAAAAA GACAAGCTAG GAAACAAAAA GCTAAGGGCA AAATGTACAA ACTTAGAAGA AAATTGGAAG ATAGA

# SEO ID NO:1249: (Length of Sequence = 393 Nucleotides)

CATCIATAGI CCATACATAT CTATAATGGA CAGAAATATG AGAATGAATA AGCAAAGATA CITATGTACA CCAATAATAA AGTAAGAAG GTAAAAAAAT TCATGTAATA AGAAAAAATA ACAACCCAGA AATTTAAGAN TTAAGTAGTA GTCAAATCTA ATTGGAATAA CTCACCTATA TAAAANACAA GAGGAAGGAA ACTTTATACA TAGGTCTGGA AAATATCACA ACTATGTTCC CAGAAGANTG TTTATCTCCA CAGCATCCAA CCTAGTGTCA TGCACACAGT TGGGACTCAG CCACTGTTGC CTGATTGATT ATGAAGACAG TCACTGTGAT CAACCCAACA GTAATTGAAC GTTCATTTTT AATANGGTCA GTGTTAAATC TGT

# SEO ID NO:1250: (Length of Sequence = 391 Nucleotides)

CGIATGIATC TITNATITAC ACTGCACACC TIGCAGCATC CITACCITGC AGAGIACIGA GICCIGGCIT CATGAATIIN
ATGICAAGIA AATGGGITTI AGICATCCCI AGITCATGIG CATGINCCGA GAAAAAGGGG AGCITCIAAA ACATGIGGGC
AAACCACAGG AAACAGIGCA ATCCTGIGIG TCTCCTATTC CACTTACTCC TCAAGGCCCC AAGGIAGGAC GCATGITIGG
TGGCITTCIG GCTTACAAGI TCCAGIGCCI ACTCCCATTC CCTCAGAGGI TIGCIGIGAT CACTGAGGGG AAGCAGAATG
GAGCATCGIG TGGICCTTAC TGGAGGACTC CTIGCAGCAC CTGAAACAAC CCAATGITGI TAGAGGCAAA T

# SEO ID NO:1251: (Length of Sequence = 320 Nucleotides)

GCCTCANAAG GTCCTTCCCA GGCTTCTCGC AAAGGAAGGC ACTGCCTCIN CACACCTTGT GAAACCTTTC CAGGACCTCC CAGTCAGAGG CCGTCTGGTT CTCACTGTCT GCAGAGCGCC CTACAGCCTG TCTGTGGGTG AGCGTGTCTG TNAACTCTTG TCCATCTCTT CTGTGATCTG TGTGCTCCTC GAAATAACTG ATTTINTCTC ATACACCTTG GAATCCTGAG TCCACAGAAC AGAGGCTCAT ACAAAGGAAG CTTTCAAAGA GTGCTCATCG ATTTCTAGGN TTCTTGAAGA CAGGCACCAN GTTTTGTTCT

# SEQ ID NO:1252: (Length of Sequence = 367 Nucleotides)

CAAAAAAACA AAACCAGTTA TGCAAAAACA AGAGTACAAA ATGCCCCTTT CTGAAGCTCA GTTTGAGAAA CTGATTTCGN
ATCTAGCTTA TTGATTATAC TCAGTTTCAA TTCTCCCTGT GCAAATAATA CATAAAGTCA TTAATGATGA TTTGATGANC
TGAAATCATC TTCGCTTAGG ATCGTTTGAC ATCATAACCC AAATATAAAA AAGTTATTCA AGATTCACAG AGATAAAACA
GTGCCTCGGA AACATAATTC ACCCATGTAT ATATAATANT TTTMGAACAT ACTTTTTAAA CATAAAATCA CAGTCAAGGC
AGTGATAGCA TTGCATACTC AGTGCATTAT TTCATGTAGT GCCTTCC

SEQ ID NO:1253: (Length of Sequence = 393 Nucleotides)

TTGCTTTCAA GACAACACIC AGITGCTAAA CCCATTICCT TTTCTTTAGG ATATTTTCAT TGTCTCCGAA TTTTAGAGCT
GAAAAGIGCC TTAGAGATCA TCTAGITCAA CCTCTCCGIT CAAATGGAGA ACCTGAGCCA CTAAGNITCA CAGGAGAGIA
AGATAATTGA GCAAACAACT CCAAGIAATG ACAGAAAATT ATAGGAGAAT CAGTACAAAC TGTGAGAATT TACTATGTTG
TTAGCATCCT AAGTATGAGT TTAGAAAAAGG TAGAAGTTAT AAGAAAAGTT AAATTGTTTT AATATGAATG GGATTCCACT
GTTACCTTCA NGNTAAAATG GAGACATACT TTTTNCTTTA GGTATTATAG TTAAACGAAT ATTGTATCCN GTG

SEQ ID NO:1254: (Length of Sequence = 377 Nucleotides)

CAAAAGCAAG GAGATGAGIT GAAAGACAGI TITINCITIAA GICATCAGIA TGGGATGICA GCAGAACAAA AAITAAAAAG
ATTAATITINC CITTIGATCI AAAACITCCI TAGITIGAGC AGTAGGIGCI ACAAAATTAT TIACATATCI TAGIATCATA
GITAAATGIA ATGIGITTAG GAGAGGAAAA CAAAAGATAC ATTINCITTA AATTCATTAA GAAATTITCA AAITCACITT
GIAGCCCATG CIGNATAGAA TIGGGCTGIG TIGGIACATT TGAAACACTG TITTATGITGC TIGAAACACT TATTINITTA
ATCGCCGATG TGATGATGCC TATGCCCGAG ATCANATATA GCTAGATTGG CTAGCCT

SEO ID NO:1255: (Length of Sequence = 307 Nucleotides)

ACAAATGITA GCITTCTCTG GCCIAGAAAA AGAATAGGNT CATCAAGTCA TAAAACGAAG TATGINATIT CAGCACCICC ACAAAATGGC TICATCAAAG AAGAGAATCC CATCACATGI TACCTCTCCT CICTAGGITC TICAGCTGGG GCITIGCCTG CCCCTCTACC TATGGCAGAA CCCACTGACT CGTGGNCTIT CCAGCACTTC CACTTGCCTC CATTAGACAC TITAACCCCGC TENCCGCTGC CICATGCCAG GGAGGGCCAA TCTCCAGNCA ATGCTNCTGC TGGCTGTATG ATGACTG

SEQ ID NO:1256: (Length of Sequence = 326 Nucleotides)

TTGAGAAAAC TGCAGAAGCT GGAAGGTCAA TCTCTGACCT TCTTTCCTGA GACACCTTCA TGTGACAGGT GTCCCACTTT
ATGCCTGGAG GGAAGGAATG ATAACACAAA GATACCAAGA AGAATGTGAA GAGACCTTTC TCAGTTCCCC CCAGTTCAAG
ACCATTATAT CGTACCCACT TTTGTCTAAT CANGCTTCTA TATGACTATC CATTCTTTAT CAAAACTAAA CATAGAAATA
TACGATTATC TCAATTTCTG TCTTTGNTTC TGAAGGCTCC TGTGTCACAT AAAACTTACA TTAAATAAAT TTGTATGTCT
CTCTTG

SEO ID NO:1257: (Length of Sequence = 224 Nucleotides)

TTTTTINAGA GGGATTCTCA CACAGTCACC CAGGCTGGAG INCAGTGGCG INATCITGGT TCACTGCAAC CCCTGCCINC MGGITTCAAG CGATTCTCCT GCCTCAACCT CTCGAGTAGC TGGGACTACA GGCACCTGCC ACCATGCCCA GCTGATTTTC CTGTTTINAG TAGAGACGTT GGCCAGGCTG GTCTCTTAAC TCCTGACCTC AGGTGATCTG CCCG

SEO ID NO:1258: (Length of Sequence = 329 Nucleotides)

CAGGGITTC TITCCCTACC CITTGIGAAA ACCAATCAAT TACTAGATGA GIGGATGGAT GCAGAAAAAT CIGGGCTGAG
CCAAAGICCC TITTGGAAAT ACAAGCCATA ACATTCGAAG GACATCAGCG ACCITGGCTT GITTAGGIGA TITTINCTICC
AGCTGCAGGT AGICTTGACA AGGAGCGITT AANCAGAAGG CICAAGATGC ATTCCTTGIG TAGGTGGCAG AGAGCACTTC
TAATGITAAG TGGGGTACAG NICAGCTGCC CCCCCACGIA GCCTGGACAT CGTCTINICC CCATAATCCT INNCATCCCT
ACAAGGTCC

SEO ID NO:1259: (Length of Sequence = 374 Nucleotides)

GGICATATGI TACATGCATG TITIGINCAAT ATGIGTATGI CAGGNCCATC TICACAAATT TNCATAGCCC CTTCTGTGAT CTGTTAAATA GGTATATTTA GCCAACCCTC TCAGCATAAA GCTCCTACCC CAGCTGCTCC CCCTTCCAAG TGCCTGCATC TECTOTIGGO TOGGAGOTOS CITOCOAGOO TOTAGGATGG COACOTIGAA GGOTGIAACO CITTAGAAGA AATAAAGTOT COTITICTAA ATITATAGAT TOTATGATIG TITTAAGOTA ACAATAGOAA TGGCATTATO ACCICACITT CIGIGIGIGI GOTTAGCATA GIACOTGACA CATGGCACIT GAGITGGIAG CTATTITITA ATAT

SEQ ID NO:1260: (Length of Sequence = 353 Nucleotides)

CTCAGTCAAA AATAGCAGCT GCTGAATTAG CATGGGCATA CCAGGCAAAT AAGCCTGCAT TGTCATAGCG TTCCCTTGAT
TGCNCTATGA AACTGAGTAA AGTTTCATTT CCTGATTCAA GAATTGCAGC TAAAATATCC TCTGGACAAA GAAGAAGGGA
AATTTTTTGA TAACAGATGT GTTGACTCCT TACAGTATAA AGCCAATTTC TGTCATATCT CACCAACAAT CCTGGTTTCT
ACAGTACATC AATTTTAAGT AATGGCCAA ATCATGGCAG CAAAAATATG TTCCCTCTAG CTGTTAGGGA CTTTGACTTG
NAAAACAGGA GTTTCAAATC ATCTTCTTCA TIT

SEQ ID NO:1261: (Length of Sequence = 294 Nucleotides)

TTAAAACAGA CAGCTAAGAT TATAGGAATA TTTTAAATAA ACAGCATTTA TTTTAGACAC ATTTCAAATA GAAGCCACAA TAATCAAATA GATATTATCT GAAAAACGTT CAAAAATATT AACCCTTTAA ATGTTCTTCT CTGAAAAATT AGTTTATCTT TAACAAATTA TTCTGAATTA TTGTGTCAAC ATATAAGGTT ATGCATATAT ATNCACTTGC TGGTCTCTAT GTTAAAGCAA ACTAGGTAAA AACTAGAGGA AATATCTGGA NCATAAAATG GTTAACAATT TACG

SEO ID NO:1262: (Length of Sequence = 292 Nucleotides)

ATGATGAAGG GTTGGAGTGA TGCACCTAGA AGTGAAGGAA TGCCAATGGT TGCCAGCAAA GCACCAGAAA CTAGGGAGAA ACAAGGAAGG ATTCTNCCAC AGTTTCAGAG GGAGAATGGC CCTGCCAACA CTGTGATTTT GGACTTCTGG CCTCCAAAAC TATGAGACAA TAAATNCCTG TTGTCTTAGA CCACCCAGTT TGTGGAATTT TNITACAGCA GAACTAGGNA ACAAATACAG TTTTTTTTTTG CAGTAAAGAA GTTTTAAATC TGGGTTATGT CCAATGTATC AA

SEQ ID NO:1263: (Length of Sequence = 303 Nucleotides)

GGITGAGGIT GTGGGTAGGA TGAGAAGACG ACAGGATGAA TCITACCCCC CAGCITTAGI GGAATICIGI GAAACACCTG
GGAATGIGIT AGCATCAGGA GAATTCCTCT AAGGTATGAA GAATGACAAC CIGGGACCIT TCITGIAGGT GGCTCTGAAC
CTAACTATTC CCCAAAGATT CCCAAGTGGT AGGAAGGAGG GGGTGCAGAG GGATATTAAT CATGGTCATT AAGTCTCAAA
ACATTTCTAC TTCAAGTGAA TACATTAACC ATGCTGAGGC AGTIGAACAA CIGAATGCGT AGT

SEQ ID NO:1264: (Length of Sequence = 313 Nucleotides)

GGGACIACAT CAAGCACCTG CGCGACATCT GCGAGGGCTA CGTCCGGCAG TGCCGCAAGC GCGCAGACAT GTTCAGCGAG GAGCAGCTGC GTACCATCTT CGGGAACATC GAGGACATCT ACCGCTGCCA GAAGGCCTTC GTGAAGGCCC TGGAGCAGAG GTTCAACCGC GAGCGCCCAC ACCTGAGCGA GCTGGGTGCC TGCTTNCTGG AGCATCAAGC CGACTTNCAG ATCTACTCGG AGTACTGCAA TAACCACCCC AACGCCTGCN TNGAGGTCTC CCGGCTTACC AAGCTCAGCA AGTACGTGTA CIT

SEQ ID NO:1265: (Length of Sequence = 290 Nucleotides)

TTTCTATGTG TAAGAGAAAA TAGAGATGGG TATACATACT GTTGTTTTTT TTGAGCCGAG AAACTGTGTG ACCGGGGCCT CAGGTGGTGG GCATTGGGGG CTCCTCTTGC AGATGCCCAT TGGCATCACC GGTGCAGCCA TTGGTGGCAG CGGGTACCNG TCCTTTNTTG TTCAACATAG GGTAGGTGGC AGCCACGGGT CCAACTCGCT TGAGGCTGGG CCCTGGGCGC TCCATTTTNT NTTCCAGGAG CATNTGGTTC TTTGGCGGGA CCCACGCAGC CCTGAGGATT

SEO ID NO:1266: (Length of Sequence = 322 Nucleotides)

COGRACAGATO TOACTOTOGO COGRAGAGOG GGACACTOTO ATGGTGTTCT TAAGCTCATA GAGTGGCAGG TTGTCTGAAA
TGCCACCATC CACGTAGCGC ACCCCCTGGA GGGAGGGAGG GATGAGCCCA CAGTACACGG GGATGAAACC NCTGCAGACA
TTGGCCTGGA TGAGCTCGTC CTTGGAGTTN AAGTGGGATA TAATGACATT NTCGCCGTCT GACACGCGGG TCAGGGAGAT
GCCCAGGGGC CCACTGGCAT GCTCATGGCT ATCAGCAGGC AGGACCTTNA GCAGGAAACT CGGGATGATC TTTTACCAGG
TT

SEQ ID NO:1267: (Length of Sequence = 310 Nucleotides)

GTAACCCATC CCATAGGGTT GINCTATGTA TICTIGCCAG GTGGGGTTGG AGCACCTTGT GAGCTCAGCA GCCCAACATC
GATAGTAAGG GAGTCAGGGT TICTICATCT TCCCTAGAGT TAGAACTCAC TICTACAGCC ACTGTGTCAG GGACCACTTT
GAGCGCCCTT GGCACCTGCT GGCTGGAAAT CAATTTAGCT GTAATGGATC TGGCCCAGCT TTTCCTCTCT TGGGTCATCT
GCACTCATAG TGGTTGAAGC AAGATCTACC AGATGGGGAC ATTGAGATGG TCCCTTTCTC CTTCTCATTT

SEO ID NO:1268: (Length of Sequence = 338 Nucleotides)

GGGCTGCTCG TGAGGATGGG ACAGCATTGA CTTACTGGGG AGACTCCCTT GATGACAGCC TTACACGGTT ATTCATAAGG
AGGCAGGAAG AGGCGCTAAC AGTAAGCATG TTCTGGGGTGG TCTTCGGGGT GCACATGTGC AGCAGCTGTA CCTGCTTGCT
TGTATGTTAC ATGTCTCATT AACATCTGAA ATCTCCACCC GGGAGTGTGT TTTTNACTAT TATAATGAGC AAAGGTTCAG
TCTGAGGACA GGTAAAATCA AAAATGTGCA CCCTCTTACG GGGGAAATTC CTTACTGGAG CTAGTTTGGC TTGAAGNGAA
CTGGACTACA GTGTGAAT

SEO ID NO:1269: (Length of Sequence = 363 Nucleotides)

CTGCTAGAGA GTATTYCAGG GTCTGCAGCA TGTTGTTAAG GCCATTAAGC ATATGTTAAG GCCATTAAGA GCAGTAATTA
TAAAAGGGCC CTGCTAAAAT AAATATCAAG TTCCCTTAAG AAACTTCAAA ATTATGAAAG TTTCAGGTCA TTATTTTGCT
ACAAATGANC TTAGCAGCTA AGNAAAATGT CTGCCTGCTT ATAAACTAAA TATGGTATAA TTATATATTN CTNTTATGTA
TTTCTAAAGC TACATTTTCA CCCTAACTCT ACTACAAAGT AGTTTCGGGA AACAAAGTAA AAGCAGGGGN AATCCAACTT
CAAATATAAT CAAATATAT

GATAAGTGAG ACTAATGGAA TOGTTTCCCT CTAACTTCAT AAAAACTTTA AGGATTATCT TTCTTGAGTT CTCTGTATTT
CTGTTTTAGA AGAAAAGAAC AAAATTTCAG AAACAAGATT ATAGTGCTTT TNCTAAAGTA TAAATACGTG GGCCCTATAC
AAACTGGCAA ATTCATTAGT CTTAAAGCAG ACATCCAAGC TATTGTGGGT GTTTGGATGA CACCATTTTC ACAGTAGGAA
ATCATTTCAT TCTGAGCGTG GGAATCGGCA TTGGTTAACG CATGAGGTTT TATGTGGTAT AAACACCTGG GAAGTGAGAG
AAAAGNCAGC ACAGAAGCTC TGTGGGAGCT CTTCTGAGCA TTG

<u>SEO ID NO:1271:</u> (Length of Sequence = 335 Nucleotides)

ATGCCTCTGG CTTGTTTGAC TGCAAAAGGT GATGTGCAGG GGTAGAGGTA GGGTACTAAT TTACAGTCAC CAAAATTAGT ACTGATATTA ATCAGTTTAG TTGGATTAAG ATGAACAATG TTTAATGCTT TAAAGANTCAT TTTTTTGCCCC AACAGGACTG TGCTATATTA AATGACACCG TGCCCAAAAG CTCAAAAATT ACATAGAAAG TAAAGTACTT CTTGAATACT AAAACAGTTA AGCATAAAAAG GTTGTGAATT GGTCCCAAAG TGATATTAAC TTAAACATTT AATCCTACGN NCTATCTTAG CTGTACCCTC TAAAAAATGCT TAGGA

SEO ID NO:1272: (Length of Sequence = 323 Nucleotides)

GTTTTAGATA TTTTAAGATA TTTAACTGTC CCCTGTGGCT TTTAAGGAAA AAATAAGTAT AAATNCTTGA ATATTAAGAN TTTTAAATCA GCTAAATTCA GGGCCCAAGAA CTATTTAAGA TGATTCANTG AGAAAGAAAA GGACCTAACC TGGAAAAAGA GTTTCAAATA TGCCAGTACG TAGGGTATTT NTGGAAATAC ACAGTCTAAA ATTAAAAATT NNAACTNATC AATGGAATTT AAATCTATAG CACTTTAAGG CTGTGGAGCC CAACANTAGG GGNTACTTTG GGGGCACATG ATCTTTCAAA ACATAAATTA GGG

# SEO ID NO:1273: (Length of Sequence = 368 Nucleotides)

GCAATGGGAT CTGGAGCCAA AGAAAAATAT ATCTGAGTTC TAGCTCCTCA CTAAGTAACT GTGTGATAAT GGGTATGTCA
CTCACCCTCT TTCAGCTTTG GGTCCTTTAT GTGTAAAAGG GAAAAACATA TGCCTACATC ATAAGGCAGA TGTGAACATC
AAATGTTATC AGTAACTGTC AATCTGTTTT ATTAATTGTA GAATGTCCAA AATATTAGTT TGTATGGACT TCAATGAGTA
TGTTTTGTGG AGTGGAGTGG GGGAAAGGGA TCATTGCTTA CCCTCTGCAC ATATCATGTT TCAGCCTAGT ACAAGGCAGC
CATGAGCACA AAGGGCTAAG CTACTTAAAT CAGNCCCCAA ACAACTTC

# SEQ ID NO:1275: (Length of Sequence = 319 Nucleotides)

AGATTACTCT TIGCAGAATT TIGGITAATT GIGAAGCIGA AATATCCTGA CTCTACCTCA AAGITAATGT TITAGGIAAC TGAACAGGTA TICTNCCCAT TACTAGTATT GAAGICAGAA TACAGAAACA AATAGTTACT GCCAGAAGCA GAATGGAAGA GCCAAAAAAGT ACACAAAATG GACGCCATAA AINCIGAAAT AAAAGIGTAT GATGIGITCT GAGICACTGT AGAAGICATG CATTTATTAT CAAGATAGAA AAGAGCAGAG AATGACGIGG GACATTGGIC CTCGGAGGGC TICGTANGTG GITCGGTCC

# SEQ ID NO:1276: (Length of Sequence = 324 Nucleotides)

CTGCATTGGG CAGGACAAAA CCTGCCAGAT TCAGAAGGTC ACGANTCATC TGGCCTTTAA TGCTGATATC CAGTGGAGAG CTGGAGTGGA GGCTTGGGA AATATTGACT TCCAGGACCC AGGCCTTGAG GTTTCNTCT AGCATGATGT CAAAACCAAA GAGTTCATGG CAGCTATAGG GCCGTCGCAC ATACATCTTG AGCAGGCTGG TCACATAGGG CTCTGACGAG ATGATAGTTT TGACAACAAC ATCCTTTATC TTCTCCCAGA TGGCGTCGCT ATTGATTNCC CTTCTGGGCT CAGGTAGTTC CACAAAAGCC TTCA

# SEQ ID NO:1277: (Length of Sequence = 388 Nucleotides)

AGCAAGGCGG TGGGGTAAGT NTGGACCTTT GTGTACCAGA GAGAACATCA TGGTGGCTTT CAAAGGGGTC TGGACTCAAG CTTTCTGGAA AGCAGTCACA GCGGAATTTC TGGCCATGCT TATTTTININ CTCCTCAGCC TGGGATCCAC CATCAACTGG GGTGGAACAG AAAAGCCTTT ACCGGTCGAC ATGGTTCTNA TCTCCCTTTG CTTTGGACTC AGCATTGCAA CCATGGTGCA GTGCTTTGGC CATATCAGCG GTGGCCACAT CAACCCTGCA GTGACTTTGG CCATGGTGTG CACCAGGAAG ATCAGCATCG CCAAGTCTGT CTTCTACATC GCAGCCCAGT GCCTGGGGGC CATCATTTNG AGCAGGAATC CTCTATCT

SEQ ID NO:1278: (Length of Sequence = 354 Nucleotides)

GGACTIGIAC CCIGGGIGGI GAGAAGACCC TGATIGGIIT TATTAGIGCA TITCIGIAAG INACIGGGAT AATCATGIIC
AGIICAGCAT TITATGIGAG TITCIGAAAG CNCITTAATC AACTCCATAG ACAAGAITAT AGIGTIGCAC AGCAATAGGC
ATGGGCCCATG TCIGCACTGG AGGIAAGIIG CAAGGIACAC CCACGGGIGA TITATCACTC TTACAAAGAT GATAACTAAT
GAAGACCGCA TCIAGAATGC TCITACTGGA GATGGITTAC AGAGCATTIT TAATCATCAT ACTTAGATIT ATATTAATAT
TTCITTTCAA ACIAAATTAT TCCAAACTGT GCCC

SEO ID NO:1279: (Length of Sequence = 347 Nucleotides)

CCACTICAGI GCITCIGIGI CCCGAAAAGA TCTTTIGACG CATAGGGCCI AACIGIAATA CACTIAAAGG ATAAGICICC ACCCCAAGGI GAACAIGGGI CAIGIGITAC ACGCACATTA GITCATTATC CAIGIGIGAG GACCICCITI GIGAACAGIC ACAGCICCIC CIATAACCIG TIAAATAIGI AIGITTGATC AACCCATICA ACTIAAATAC TIGICTIACC TCTCCITCCC TCAAAGIGCC TGGCIATACT TCCCAGCCIG CGGGATGGCC ACCITGCAGG AIGGAACCCI TIGIAAGAAA TAAAGICICC TTTCCCAAAIG TACACATTGI AIGACIT

SEO ID NO:1280: (Length of Sequence = 344 Mucleotides)

ATCCTTAGCA TECCTGINIT ACTGAGACCA TAAACTITIT INTITICCTI CTGCCTTCAC CCAGTGIGIG TEAAGTCTTG
CTTGTTAAGC TCCCACACTI AAATGGCTGC TTGCAGAATT GCAAAGGGAC TAGGGAGAGA ACAAAAACAG ATATGCAGGT
GGTGGTTGTT AACCAGACAG GATTTCTAAG GAGGGTTCAG GCAGTCAAGT GGTTTINTGT ATGINTTTTA TGTTCATAGT
TTTGAGTTTT ACAATGTGTG AAGCTTACTT TTGCTAGCAT TAGGTATAGT TTATTTTGAA AGAATGAGGC TCCTGAAAAT
AAACATGCCC AGTAAACTAT ATCT

SEO ID NO:1281: (Length of Sequence = 331 Nucleotides)

TGAGGAACAT AAAATGGCTT GGTAAAAGTA ATAAAATCAG TACAATCACT AACTITCCTT TGTACATATT ATTITGCAGT
ATAGATGAAT ATTACTAATC AGTITGATTA TNCTCAGAGG GTGCTGCTCT TTAATGAAAA TGAAAATTAT AGCTAATGTT
TTTCCCTCAA ACTCTGCTTT CIGTAACCAA TCAGTGTTTT AATGTTTGTG TGTNCTTCAT AAAATTTAAA TACAATTCGN
TATTCTGTTT CCAATGTTAG TATGTATGTA AACATGNTAG TACAGCCATT TTTTTCATAT GTGGAGTAAA AATAAAATTA
GTATTTTTAA A

SEO ID NO:1282: (Length of Sequence = 310 Nucleotides)

CCATGICAAA TGTAGTITAC AAAGGGAAAG GACAAGTACC TITMTATAGA ATATACAGAC ACAGCATCAC ACCACAGGGC CCACGGGAGG GTCGGGGAGA CGACACTITT TCCCTGGGAA AGGCAGCTCT AATCCCAGGA ATGGTTCTCN GCAGAGGCTG GGTGGCCAGG AGCACTGTCC TCTAGCCCCC TAACTCAGCC TCTGCTTCAN CTCGGTTCCC ATTTCCTGCC TCTACCCCCC AACTCCTTAT AAAGAGCCCC ATGAGCTAAG ACTAAGGAGA GGTTCATNTC CCTTGGGGCG TGTGCCCCAT

SEO ID NO:1283: (Length of Sequence = 323 Nucleotides)

ATGAGGATTA ATTATATCTG INTCACCCAC ACAGCTCCCC CATACCCATA ATCTTTATTT ATTINCTTCG ITTCTTCCTT
ATACCITGIT TCAGGCATTA AACCATAACC TGITATTTAT NCTATCCTTT TCAAAACAGG TGIGGACCAT GCACAGATGA
CCTATGACGG GCAGCACTGG CACGCCACGG AAGCCTGCTT INNITGIGCC CAGTGTAAAG CCTCTTTNIT GGGATGTCCC
TTCCTTCCCA AACAGGGTCA GATTTACTGC TCAAAAACGT GCAGTCTTTG GGTGAAGACG TCCATGGCCT CTGAATTCTT
CCG

SEQ ID NO:1284: (Length of Sequence = 283 Nucleotides)

TTTTTTCACA AGGIGAAAGA CCTTTATGGA CATGACAGAG AGGACCIGAG TTAAGAGGGA AAATACATCT NCATAGCTAG GTTCACATTC AGITATGTTA GTCCCAAACC TACAAATTCA ACATGATCCC TATTAAAATC CTACCAATAT AGITCAAAAG CTTGACAAGT TGATTGINAC ATTTATATGA GAGANTAATT AAAAAAAAAA AAAATAGGGC CAGGIGCAGT GGCTCACGCC TGITATCCCA GCACTTTAGG AGGCCAAGGC GGACAGATCA CTT

# SEQ ID NO:1285: (Length of Sequence = 341 Nucleotides)

CATTCINATG ATGIAGAGGC CAAAATGGTA TITNATAAAG AGGAAATTAC TICTGANCCA CCCCAGCTGG AAACACTGGT AGTATCGGCA GCAGATGTA TITACAGCAGA CATGACTGAN CTGGGAACAC TGCCCTGTGA GACAGCCTGA AAGTTTTTTIN CAGATTTINI GTGAACACTG TCTGAATTCA CATTTGGCAA AATGATTCTN CCAGTTTCCC CGGCTTCTGC TAGTTTGAGG CAATCTGTTT TATGTGCCCC AGCTGAAGAT CTTTCACTAA CTCGATCTTT AGAAGCTAAC TGCATTGCTG G

# SEO ID NO:1286: (Length of Sequence = 354 Nucleotides)

GCCCTATTIG TACAAAGIGI GCATGINAGC GIGCGIGIGI GINITGCATI TITCCCCCTI TAGGIGGITC AAATTIGGAA
TITGIGAAGG CAGAGCIGAT AATTAGAGAC AATAAAAATC TGCAGAGTAG ATGGITCCAC AAACAAGACT ATGAAAGAGG
GGATAAAAAGA AGAGCICAAG AAAGACTCAA GAACAGTATA TAGAAATAAT TCAATTACAT TATGIGIATI TITAAAGAAAA
CATGITCAAA CIGCATGAGA CAGAAAATAG CACTCNGITA TCCICCTAGA CITCINAAAG TITIGAGITT GICIGCAATC
TTCITCCATT AATCGNCTIT TGCCATCTTC AGAA

# SEQ ID NO:1287: (Length of Sequence = 354 Nucleotides)

CTCTCTCACC CGGTGGCCTA TAGCCCCCAA CGTGGTCAGC AGCTGCCTCA GCCATCCCAG CAGCCTGGTT TACAGCCCAT
GATGCCTAAC CAGCAGCAGG CGGCTTACCA AGGCATGATT GGGGTCCAGC AGCCACAGAA CCAGGGCCTG CTCAGCAGCC
AGAGGAGCLG CATGGGGGGC CAGATGCAAG GCCTGGTGTT TCAGTACACT CCACTGCCTT CTTACCAAGT TCCAGTGGGT
AGTGACTCGC AAAATGTGGT CCAGCCGCCT TCCCAGCAAC CCAC CTGTGAGC CAGTNTGTGC AAGGAGGCCT
NCCAGCAGCG GGGGGTACCA GTGTACTATA GCAT

# SEQ ID NO:1288: (Length of Sequence = 231 Nucleotides)

TTTACITAAT TGGIATAGAT TGAGGNICAT GCATCANCAA GCAGTITTGA AATINTCCCC AAGTGATTCT NACCTGCAGC CTGGGIAAGA AGTCGCAGGG CTCCTGGATA GTCATTAAGT GAACTGTGGI AAGCACTGAT GTAGCAGGAT TACCTGCCCT ACTAGGIGCC GGAACTGCAT TINCTTGCTC ACAAGTAATT TTTTTAAATG TATGCTCGCA TCCCTGCCTT G

# SEQ ID NO:1289: (Length of Sequence = 329 Nucleotides)

GGACACTGTG AGGGGAAAGG ACAATTITAA AATTCCTTTT CAAGGAAAAA AAAGGTCTTT ATGCTTTGCC ATGAGGCCAC
ATTCAGCTGC TATTTAANCT TAATATCTTG AACCTAAAGA ATGCTGACTT TNCCTACATT TCCAGAGTTA GGCAGTATTC
TACACTTAAA GACTACTACT ATTTTNATAA AAGGTAATCT ATTCAAATTT CTTCACAGAT TTCCCTTGCT GGGGATCAGT
TAGTAAAGAA GGAGGAATTC CTCTTACCCA AGAGGAATTG CATTGCTTA ATTTAGCAAT GTGAGGTAAG GCCTGCCNAG
TGCCCAGGG

# SEQ ID NO:1290: (Length of Sequence = 297 Nucleotides)

GGAGGCACAT GTGCAGCTTT GTTTCATGGG TAAATTGCAT GTTTCTGGGG CTAATGTGGT TTCTTTTACA GAAAAAAGTA TCAGAAATAA TCGGTTAACT TTNCTCACAT GGTCTTAACT CTTCTTCAGG AAATATCTAA CTTGTAAGTG CAATCCTTCT TGTATAGCTG CCAGACCAGA CCCAGATAGA CCATAATAAA ATAAAATACA CAGTCAGTTT TTAATGCAAG CCAGAATGAC TCINCTGTAT CTTTAGCCTT TCCAGGGGGA TACAGTGAAC TCAGATATCC CTGCTTA

SEO ID NO:1291: (Length of Sequence = 317 Nucleotides)

CTATAATCCC AGAACTITIGG GAGGCCGAGG TGGGCGGITC ACCTGAGGIC AGGAGTITGAG ACCAGTCTGG CCAACATGAT
GGAACCCCAT CINTACAAAA ATAAAAAGCA AGAATATGCAA AATAATGTGC CAGTNTGGTG CCGTATACCT TTAGTCCCCAG
TTACTAAGGA AGCAGGGTGT CINAAACAGA AGAATCACCT GAGCCCAGGG AGGTCGAGGC TGGCTAAAAA TAGATCTGCG
GGTAGTGGTT AATNGGCCT TGTGAATNAT TCAGCATAAG GAACTGTCCA ATATTTTTTT AAGCTGTCAG AAAATCC

SEO ID NO:1292: (Length of Sequence = 293 Nucleotides)

GAAGATGGAA ATAGACCACC ATACAAAACA AAAAAGACAG AAGAGAATAT TAGCACTCTG TIGCAAAGGA GAATAGGTAT
GCTCAACTGG TAAGTAGAAT GCAAATATTC CAATATCTGA AAAAAATCCC AAATCCAAAA TACTTCTGGT TCCATGCATT
TTINCTAAGG GATACTCAAC AGGTATTTTA AAAGATCAAA ATACAGATCA GAGAATATGG ATACTTGAAG ATTATGAGCA
AACGAGGATT AAGGNAAACA TGTTGGAGGA CTTTTTAAAA ATGTGTTAAA GGG

SEO ID NO:1293: (Length of Sequence = 310 Nucleotides)

TCCCAGAAAC ATTACGGITT GATATCAAGT TCCIATTITA AGAGICACC ATTTGCCCAC CATAAGINCC TGGAGAAGGT
AGGGIATTAC AGGACTAACC TTCCAGTGGC TGATTCTGGI GGITTCCACA TTCAGGITTC TCTGATTIIN ACAAGCITTT
TCCCATAAAG ACTGCATTIN CITTAAAAGC TTCTCCTGCA AAANAGCCAT AAATTGAAGC ACCAGTGAAG ACAATAAAGT
AACATACAGA CCGTTTCATT GGGAGGGGC CCNGAATGNG AGACAAATAA GTCCCTAGTA AATGGCATTT

SEO ID NO:1294: (Length of Sequence = 275 Nucleotides)

GAATGACGAT GTCAGGGGCA TCAGGAAAGG TAAGGGCCCG GAAACCGGC CCTTGGAGAA CCCTGCCCAG GGGAGGCCCA
GCCTACTCAC AGGNTCCGAC ACTCCAGGCA GAGCAGAGGC CAGGAGAGGC CCAAAGAGCT AGGTCAAGCA GCTGGCTCCC
CTGGGGTTAA ATACATGGGT TTTTGTTTTA CTGCTGTGCT TGATATACAT GAAGTAATGA ATACCAAGCA ATTCATTTTT
CCTGCATCTT TACTTTTACA TTTGTNCTTA GGTTGCCTAA AACATTINAA ATACAATAAA ATGAGTGTAG CAAAAATTAT
TGAAGCT 327

CAACCICIGC CICCCGAGIT CAAGCGATIC TCCIGCCICC CGAGIAGGIG GGATTACAGG CATGATCCAT CACGCCCAAC
TAATTITITA TITITAGIAG AGATGGGGIT TCICCGIGIT GGICAGGCIG GICTCGAGCT CICGACCICA GGIGATTCAC
CCACCICGGC CICCCAAAGI NITGGGATIA CAGGIGIGAG CCACCGCGCC AGGCTACTGG TCTCAATTCT TTIGGATACC
CAGAAGCAGA AATGCTGGGA TCACATGGIA GICTC

SEO ID NO:1296: (Length of Sequence = 247 Nucleotides)

GGAAGGAACA ATTGATAAGA ACCGGGGACA TCAGGGAGAG AGAGTATTTG AGCTGGGCTT GATTCCATCG GGTAGTATCT GGAAAAAAAA AAAAAAATCC CAGATGAAAG AATGTACAAA GACATGAGCA TGCAGGGCAC ACTTTGGAAA ATGGGNGAAG TCTGACAGGC CTGGGAGAAT GAAGACAAGT TAGCACCAGN TTNAGAAGGC CTTGATTACA NGGCCAAAAC TTTTGGATTT TACACTA

SEQ ID NO:1297: (Length of Sequence = 246 Nucleotides)

GACTICTIAC AATGCAGCAG CAAGAGAAAA TNAGGAAGAA GCAAAAGCAG AAACCCCCAG TAAACCCATC AGACTICGTG
AGACTITATIC ACTATCACTA GAATAGCATG GGAAAGACCA GCCCCCATAG GTCCACTACC TCTCCCTGGG TCCCTCCCAA
AACATGTGGG AATTATGGGA GATACAATTC AAGITAAGAT TTGAATGGGG ACACAGTCAA ACCATATCAT TCTGCCCTTG
GCCCCT

SEO ID NO:1298: (Length of Sequence = 263 Nucleotides)

CATTGCACTC CAGCCTGGGC AACAAGAGCA AAACTCCATA TCAAAAAAAA AAAAAAAAA GAATTGCTGA CCTTTATGTG
TTTCTGTTTA AGTTCACAAC AGTCATAATT CTGTAAAATA CAAGGCAAAA CTGTAGTTTC TGATACTAGT AATATATCTA
ANTCAGTAAG TAAAAAGGAT GTGTAAAATC TTAATAGGGG AAATAATTAT TGTATGANCA AGCAATTTCA AAATCAAAAG
NCACGTTTCA GTATATATTA TAG

SEQ ID NO:1299: (Length of Sequence = 272 Nucleotides)

ATCINATIGI TGIGTAGITT ATGGCAGIGG TCICCAGACT TITITGGCACT AGGGACCAGI TTAATGGGAG ATAATITTCC CATGGACGAG GGGATGGGA GGAGGCAGGG GIGGITICIG GATGAAACIN TICCACCICA GAAGATCATC AGGCATTAGT TICTCATAAAG GAGGCAAAAC CTAGATCCCT TGCATGCACA GITCACAATG GCACTCGTCG CATATNCCGT CGACAACCCT TITITTGAGGI TCCATGCTCC CCATTITGGCT TT

SEO ID NO:1300: (Length of Sequence = 277 Nucleotides)

ACCACTGCAC TCCAGCCTGG GTGACAAGAG '.GAAACTCCA TCTTAAAAAA AATGIGTAAA ATGAAGATTA TCATACTACC TACATCATAG AATTGITTIT AGTGTAAAAT GTGTGTGT ACATTTATGT AATAGITAAC ATTTAAAGAG CACCTACTIT GTGTAAACAT ACTTTGTATG AGATACTGTT CAAATATATA TNCTAATATA TGCAACATAT TATATATGTN AGAATAGGGT CTTATATATC TTAGGAAGTT AGATCTTATA TGTTTGA

SEO ID NO:1301 (Length of Sequence = 304 Nucleotides)

GGTTGCGGGT TATGTAAATC CCAAACTTAT GAACAGGAAA TGTGTACAGT GCATGATAGG TTAAATTTIN CTTTATTGTT GTCCAACGCA GGTCCTTTGG AGAGAAAAAA AGATCACAGT GCTGACCAGG TAACTCAATA GGTTAAGTCA AGGTAACCAT TGAAAGATAA TAGGATTAGG GAGGTGTTTA TTTTATGGCA TCTTCTCTCA TGGAGTTCTT AGCACTTCGG ACAATTTGTC TNTTCCCCAC TTTGTACAGC TGTTATGTGT CATTCACCAG CCGGCTGTAT TTAACTTGCC TACT

SEQ ID NO:1302: (Length of Sequence = 335 Nucleotides)

AGTITATIGE CATACAGAAA ACATITIATA AAATAATAIG GIAGACIICI ACIICAACAI AITCACGIAA AAACATCACA GIGCAAGAAA GIGATCACAA ITAAGCAIGA AGACATCAAA AGCCAGCCAG TATIITIAACT ACAGAGCAGA ATATICIIGC IGICCCIICC TAGAAAATGI TGGCACATIC AITAACIGCI CAGGITACAA AAATCACIIC GIGICCACII CCIGICCIICC AATATATIIN CATAACIACA CIGIGITACA TIAATGCIGG TGGACAAATT AGCTCCTATA AAATCTAAAA ACCIITITCAG GIGGGCACAA IGGIT

SEQ ID NO:1303: (Length of Sequence = 316 Nucleotides)

TEGRAGORITA TATEGROCEG AGITATATEC AGCATOCAGO TITICAAGCAG ATGINITOCOT AGGCAATGAT GCAGCAGTGC
CCCTATCAGG AAGAGGGGGT ATCAACACIT ACATTCCITT AATCATTCCT GGCITCCCTT ACCCTACTGC AGCCACCACG
GCAGCCGCTT TCAGAGGAGC CCATTINAGG GGCAGAGGGC GGACAGTATA TGGTGCAGTC CGAGCGGTAC CTCCAACAGC
CATCCCCGCC TATCCAGGTG TGGTTTACCA GGGACGGATT TTACGGTTGN TGACCTCTAT ATAGATTCTG CAAACT

SEQ ID NO:1304: (Length of Sequence = 211 Nucleotides)

TATTTTTINC TRCTCCCC CCTACATATA TTCTAAACCT TCTAAAGITT TTINATTTIT TTAAGGATCA CITTATCATA
AAATAAAATA TCCTTTTCAT ATAATAAATT ACCTAATAAA AAGICTTTIT TTTTCATATT AGCCCAGGIN CITTGCTACA
TTTATATGGI AATAAACGCC TTTATTAAAA TAGANTATTA AATTATAAAG A

SEQ ID NO:1305: (Length of Sequence = 316 Nucleotides)

GAAATGATTC AGGGAAAAAA ATTTATAGTA CGITTTCAAC TITTITTITT TITCITTGAA ATGGAGTATG GICATAAAAA GGACACTAAA TAACCTGATT AAGCTAGAGT ATAGACCAAA TIGCCACTTA CITTGAATTG TITTITACCAA AGGIATCACT TIGAATAAAG ATAACTTCA TTAGACATCT ATCTTTATGT GITCCTGCCA TCATTTCAGT GAGATCAGAG GAAAGTTAAA TTAGGAACAA TGAAAAAAGCT TAAGAAAATGA ACAATCATCA TGCTTTTGTG TATGCTTAAA GTGAGTACAT GTAAAA

SEQ ID NO:1306: (Length of Sequence = 310 Nucleotides)

GGGGATTITI GAAGGCTICG CTGIGGATGG CCGAGAACCT GCTCGGGGIG TAGGTCTGIG TGTCTGGGGG ACAGITICCA CATCIGAGCA CACGGACIGG ATTICTGAAA TGTCAAAGIC TGATGCATCA CTGCCTCGGC GGCTGCTGGC CCINCTGCCA GCTTTGCTTC CAGCTCGACT TCCTGGTCGG CTGGGAGTCT TCTTGGAATC AGCAAACTGT GTTCGGACTC TGGCAGNTGC AGTTGTTATC AAGCCACTGT CCTCCCCANA GTGGAAGCCT TTCCCTGATA AAAATCCTGG AAGTCGAAGC

SEQ ID NO:1307: (Length of Sequence = 302 Nucleotides)

TAATAAATAG TATATGIAGT GAAGAAAAAG TITATAACAAG TATACATTAC ATTTAACACA CCTAGCACAT AGGACACCCT
CAACAAACAG CTACAGCTGC TGIAAATCAT GTGIATATAA TATAACATGC AAGCATATCT TCATGIATTG ATTAATTACT
ACTTCTTGGA AAAGGATCTG AGGAACATAT TTAATATATT TNATATGCCT GCTCATATGT NCATTTAGTG CTTATCAATT
ATATTTAGTG CTTTTCTATT AGCTTCATCC ATTTGATTAA GATAGCAACT TGTATTATTT AA

SEQ ID NO:1308: (Length of Sequence = 285 Nucleotides)

SEQ ID NO:1309: (Length of Sequence = 319 Nucleotides)

TITCCAATTA TTATTTIGCC AATATCCTCA ACTCTTTTGC CCACTITNAT CITCCATTCA ACCCTCCCTG CAAAATCCTG
ATCTAAAAGC AACCCAAGTA TTTGCCTCTT CAACCTCCCA GCTGCTGAGT GGTTTTGGGA ATTACACAAC CACTAAGCTT
GGTGCAGATG CACTATGGCC TCAATAGAGT CCCCCAGTGC TGCCCCACTTT CTCCTTCCAT ATTTCTCCAC AGCAGCTGGT
CAAAAATACAT TINTCCCCAA ATGTCTTACA CAACCCCCTT CTCTCTTATC ATCCTTANCT CACCCCCACC CCAGTTCTT

SEQ ID NO:1310: (Length of Sequence = 356 Nucleotides)

TGAAGITTIG CICITGICGC CCAGICIGGA GGGCAATGIG CGATTICAGC TCACIGCAAC CICIGCCICC CGGGITCCAG
CGATTCICCT GCCCAGIAT CCCAAGIAGC TGGGATAATA GGCACIIGCA ACCAIGCCCA GCIAATITIT GIAGITITIAG
CAGAGACGGG GITTCACCGT GITGGTCAGG CIGGICITGA ATTCCIGACC TCGIGATCIG CCCGCCTCGG CCICCCAAAA
TGCIGGGATC ACAGGCATGA GCCACCGCAC CIGGCCCTAT ATCCIGCTIC CIATCICGIG GGICATGGIG TATGGCTITIT
ATTTAITICA ACCIGCAGIT GITIGCAGAA CATCIG

# SEQ ID NO:1311: (Length of Sequence = 331 Nucleotides)

AGCTCAGATT CATGICTIGA GCCAAACAAG TGAATGIATC TNAGAAGACT CAGTACCACA TGGTACTGGG AGATCITACT CACTTCAGCT GGCGTTGCTC ATTAGTGAAT GTATGACAGC AGGATGTGAG GGGATGCCCA GGAGTCAGTG TTAGCATTGT CATCTGAGAT CACTGCTATT AATATCATCC ATTAATTTAT TAGTGAGCTT CACTATATGC AGACTGGGAG ATAAGGAGAA AATCTGTCAC ATTCTCTCTA GCTAATCAGA TCAGCTACCA ATTAATGAGA TTCTGAATGA AATATCAATA TGTGTTTTTC TAATTTGGAC C

# SEO ID NO:1312: (Length of Sequence = 347 Nucleotides)

TTTTTCCTT TATAAATTAC CCAGCITCAG ATTTTTTNAT AGCAATGCAA AAATGGCCTA ATACACTTCA GAACCTGGAA GATTAGCAGT GAGAAATAAA ATCAGTTAAG TTGATGACIT CTAGTATTTC ACTACATGT TGTTTTGCCA AAATGAAGGC AATATCAGTG TCTTCACACT TAAAAAGTAG TATATTGANC TTTGAGGTGA AAGAGCTGGG GTTTAAATTT GINCTITACC AATTATTGAG ATAAGTGTCC TTGAGCAAGT TACTTGCTTT CNCTGATCTT TAGTTTTCTT ATTTGTGAAA TTGGAAATGG TGGTGTTTCA GAGGGGGGTT GTATATA

# SEO ID NO:1313: (Length of Sequence = 336 Nucleotides)

GAATTCCTCT ATCAAAGTGT TCATAAAACC TGGAGCIGCA GCTGGCCCCC ATTAGGTAGT TTCTTGGTGA ACGITTTCCA
AGGAAAACTT TTTTTTAACA ACTTCATAAA GCCAAGCACA AAAGGACATT GCAATGACTG GCTGAAAGAC ATGGGACTTT
TTGTCTTCGA CGACTAAAAC GTTAAATGGG GGCTTACTTT GTGCATTTAT GGAAGAAAAC TTGGAAGGCA TTAAAGGCTA
CATTTTGAGC CTTGCATGAT TTCATTCATT TATGCATGAA TTCATTTGTT CAACATTTAT TTAGTACCCA CTATATGCCA
GGCACTGTGC CAAATG

# SEO ID NO:1314: (Length of Sequence = 391 Nucleotides)

CCGGTTTAGA CCTCAGTCG CGCTGTGAGG GCACTGTCG CCCACCTGCT CGGCTGGCTG AGCTAGGTCA GTGGAGAGAA
GCTGGGGCCA CTCACACAGC ACAGCAGGCC ACAGTCTACA GAGTACGCCA GGTAGAGCGG TTAGAAGTGGC AGCCGCTGGA
GAAAGGGTTA TAGAAACACA TCCCTGACTC TTTGGTTATG TCCCACGTCC TCTGTGTCTC CTTCCCCTTC CCTACTCTCC
TTCCTTTCTG CCTCCTTGTC TCCCTTGGAA GTCCCTGTTG TCAGTGCATT TNAGTGCATT GACGTGTCCT AAACACTGAT
CTNCACACAC CTTCTTTAT CTTCCACCTG ATAGGCAGGC CCCAGANCCC CTTTTTTCCT AGCTTTGTTC T

## SEO ID NO:1315: (Length of Sequence = 374 Nucleotides)

GAATTCCCTG GAACACTGGT GTTTACAGAG AGAGATACTT TGTGGAATGG AGCTTACATG ATGAATGAAA AAGAGACCGT
TAAAAAGTAC TAGCCGTTGT TTACAAATAA CTACCAGGTA AACAAAGAAA TCACTTTCTT TCCCCTTTCT AAGGATAAGG
GAGAATAAAA TAATCACCAA GAGGCATGGA GTTTGAAAAG TATATAACAG ATTTCTTTAT TATTATTTAC AATCAAGTTC
TGTTGGNCAA CATAATGAAA TAAATAAAAG ATGTGCCCTG GCCTGTGAAT TTCAACTCTC CTTGACTTAA GTTCTCTGAA
GGGCAAATTG GAAAGCGGTG ATCAGGCAGG GAAGAGAGGG CAGGTGGAGG CCAG

# SEQ ID NO:1316: (Length of Sequence = 353 Nucleotides)

CTTGTTTACA GGITTGAAA GGITTGINAG ATTAGTATIT ACTITTAATT TITTGAGTAA TAGAATGCGI TTAGGITCTA
AATTACTATG GAAATGCCAT AGTGAGGATT CINCACAGAT ATTAGAGACC TICAACAACA TAGTGAAAAT AGATTTGICC
TTTCTTGTAA ATAGCTGAAC TATGAAAAATT TGANCTGICA CIGGAGGGGG CATTTGCNCI GAAGTTTGCC AAAGTAAAAA
TAACTTTNCI CTTTAGTAAG AAAAAGCTAT ATTTINCAAT ACTGCCTYCC ACAGCAAACA AACAAAGTCI TGITTGTGIT
TTAATATTGG CAAAGGAAAA ATTCTCTATA TAA

SEO ID NO:1317: (Length of Sequence = 316 Nucleotides)

GAATTCCGAT TATAAGCATC AATATGCATA AAATGCTTAG AGATGGACCT GATATATAGC AAACACTCAG TAAATGITAA CTATTATTAT NACAGCACAG CAATTTATIT AAGATTACTG AGIGITCAAA TGAAAAAAAA GACATATTAA CITATATAGT GCCATTTCTG ACATAAGAAA TACACAAATA GAGGTAGTIT CTGAAACAAA GATCAAAAAA ATCTATTGTA TGGTGTCTTG TATCAATGTG GCTAAAATTT TCGAGCTAAG TTTTATNAAA GACAGATCAT ATTTCANGTA GGTGATTTTT GTATTG

SEQ ID NO:1318: (Length of Sequence = 300 Nucleotides)

GIGGGACTAC AGGIGCACGC TATCATACCC AACTAATTIT IGTATITITIA GIAGACATGI GITTCCCCAT CITGGCAGGG
CIGGICTGAA ACTCCIGACC IGAGGIGATC CACCIGCCIT GGCCICGCAA AGIGCIGGGA TITACAGGIGT GAGCCAACAA
GCCIGGCCCA TITATITACT TITTAATTIT CATTITICIT CATCATGIAG AATGGACAAT TICAGGAAAC TGATAGAAAA
TACIGICTAA CATCAAATTI TCAAAAAAGI TICTCTGIAA CAGATAAGGC AGICAATTIC

SEO ID NO:1319: (Length of Sequence = 306 Nucleotides)

CAATAAGCTT TAAAAAGTTA GTGCCACATG ACCAGCATCG ACTGGCCTCA GACATCTGCA AGCACTCACC CAGGCCACAG
GGTCAGGTAG AGGGCTCCTG GGCCCACTGT AGCCCCTGCT GGGTCAGTGT AGCTGGAAGG CTACGGGNCC TTAGTGGGGA
GCCACAGGCCT TTCCCACTAG GGGGCCTCTC ACTCTGACAT CTCCCTGTGG TGTTCGGACC AAGGGTGGGG AGGGAGACAC
GCTGGCCCTA AAGGGAGGTG GTAATNAGTG AAGATCTCCA GGGCCAGNCC ACAGGGCTCC GTCCAT

SEO ID NO:1320: (Length of Sequence = 373 Nucleotides)

GGICTIGATC TCCTGACCTC GIGATCCACC CGCCTGGGCC TCCCAAAGIG CIGGGATTAC AGGCGTGAGC ACCGTGCCTG
GCCGAGATAA TTATTITINA GIGACGATTI AGCAACCTGA AAACCTTGGG TCTTTGGGAT ATGACCTCAG TATCAACACA
GAATATTTGA ATGCTGGTTA ATATATTINT TTTAAACTGT GATAGAATTG AAATCTTGTA GCCACATTTT GAAAGTTTAT
TCTTCATTAA CTAGTCTTTT CTCACCTGAT TTTCTACAAG AGAGAATTTT CCAAAAAGGTT AGTTGTCGTT ACATTAAGAA
CTTGGGGTTT GVTTGACATG AAATGTTTCT ACACCAGCAG GTCTCAGATG AAT

SEO ID NO:1321: (Length of Sequence = 366 Nucleotides)

GITTGGCIAA TCATCCIATG ATTITCCIAT AGCITGAAAA CTITTIATAT CITAAATTIT TINATAATTI TGAAGIATTA
TTGITTGGGC TTTGIATATC CAGIGIATTI TCAATTAAAT TCCCCTAACT AAAGIAATTC AAAAGGAATA AAAGIGIAAT
GTGGGCTGGG CGTGGCGGC CATGCCTGIA ATCCCAGCAC TTTGGGAGGC CCAGGCGGGC AGATCACCTG AGGGCAGGAG
TTGGAGACCA GCCTGGCCAA CATGGTGAAA CCCTGTCTCT ACTAAAANTA CAAAATTAGC CGGGTGTGGT GGCACATGCC
TATAATCCCA GCTATTTGGG AGGCTGAGTC AGGGAGAATC TCTTGA

SEO ID NO:1322: (Length of Sequence = 362 Nucleotides)

AGGAGGGIA AAACAAATCC CCCTCCAATG CTTTGTAGAA GGGGATTAGA ATCACTGTGG AATTCGGTAT TGGCTAATAA
AGTATAAACG CTAAAGATCA ATGCCTGAGT GCACAGTTGT CCTTCAAGCC ATTGTACTTC TGCTTTCCAA GANTAGANGA
CTACTTTTTA ACCAAGANIT AAAAATAANC TCATAATTTA AACACCTCTT TCATGCCAAA TGGAAATCTT AGTGTTGAAT
AATCAGGCTC ACCTGAATAC AAAGTTGTCC TGAAAATGCT GACAATCACA AAAAAGGTTC TAGAAGCTTT TTCAAAAAAAC
AAGTTCAGAT GGTTCCCACT GAGTTACTAT TTGAGGTTAA AG

SEO ID NO:1323: (Length of Sequence = 244 Nucleotides)

CGACCTCAGT GTAAATCACA AAACGGGAAG AGCTGATATT GGCAAAATAA TTACATGGCT CATTTCCTTG CATGTCAAAA
TAGGATTTGA TTGGTTGTAA AAGATGACAA ATACCTTTNC GGTTTCAATG TTCTTAAGTG GGAAGTCACT TATTACAGAC
CINATTGGGA GTAAACAAAG CTGTTAGACC TTTCATTATC AGTCCNNTTA ATCCCTTCAA TAATCCCCCT AAATCAGTGA
GGCG

# SEO ID NO:1324: (Length of Sequence = 279 Nucleotides)

GATCCATGCC ACAGTGACCT CTGTNACCCT GCACAGCACA GAGGGGAAAG CCCTGTACCA GGTGGCGTAT GAGAATGAGG
TAGGCAACAG CTCTGACTTC TATGACATCG TGGTCATCGC CACCCCCCTG CACCTGGACA ACAGCAGCAG CAACTTAACC
TTTGCAGGCT TCCACCCGCC CATTGATGAC GTGCAGGGCT CTTTCCAGCC CACCGTCGTC TCCTTGGTCC ACGGNTACCT
CAANTCGTCC TAATTCGGTT TCCCAGACCC TAAGCTTTT

#### SEO ID NO:1325: (Length of Sequence = 338 Nucleotides)

TCAGITATIT GIGIGIGIG GIGIGIGIGI GIGIGINCAT CIGCAAACCC TGCACITCAT TATCCAAAAA ITATITGATA
TITTATAATC AGAGAAAATG CIATITITAA ACCCTACCAC TGCIGACCAA ACAACAATCA CAACAGCATA ACACTAAATA
CIGITCAACA AATCIATITT AGIGIAGIAA TITAAATAATT CCTAAAATTA TAGACATCCC TAATATICIT TCCNITAGIG
GITCCTCAGA GIGCAATCIG TGGAGCAACT ACCTTGAAGA AATTITGGGGG AATGAGACCN TGGGAACCCT AAATGITTAG
NATGGIGCIC TNGGGGAC

# SEQ ID NO:1326: (Length of Sequence = 393 Nucleotides)

AACTITIGAG GGGACACCAT CACTCAAACC ATAGCTGTAA ATCTATTCCT TGAGTCCAGA TCACAAATTA CCAAATGAAC ACGITCTCCA TITITAGGTAC TITITTACCT GTAACCCTCT GTCTACCTAA GATGAATATT TATTCATTGA ATGAATCATT TAATTTTGGT GCCCCAAAAT TCTCAGTGAA ACAATTTCTG GATACCTCTC CATCACTAAG ATAATCACTA TAGCAGTGTC ATATTCTTCA ACTTAGNACA AATCTAAAAG CTCCATTTAT CCCTACTAGA AGTGTTCTGT TGTCTTTTTC ACTCTCAAAA TATCCTCCAT GCGCNAACCA AACACTAANG GGNACCACCA TATCTTGCTC AATGGAGGCN AAATCACTTT TTA

## SEQ ID NO:1327: (Length of Sequence = 381 Nucleotides)

CTTTGGAGAA TTAATTCAGC AGTTGGTAAA ATCATTCTAT AATAATGGGT ACCATTCTGC TCTGTCCCAC ATTTTTATGA
AGTCTCTTTA AATTTAAAAA GGCAATGTGC TTTGTGGTTC TTGAGCAACT TAAATACGTT GCTCTGAATA GTTATTGTGA
TGAGGTAATT TGTAACAACT TTTAGGATCA ATGCTAATTT NCTTAAATGT TTCTGTAGTT TCCCCTTTAT TATAAAGTAT
ATTAGGCTGG ACTCTTGGCT GTAAGTGGCA GAAAACTCAA CTCAGATTAG TTAAGAAACA AAAGGGTGTT GGTGACAGTG
GTGGCTTTCA GACTATTGCT GCAGGCCCAC CTGCCATCCT CTTACACCCT CAACATACCC T

## SEQ ID NO:1328: (Length of Sequence = 289 Nucleotides)

AGAAGAAAAT TCTTAAGCAG AGTACTTAAG TACAAAATTG AGTGACTGAA AGATGCTTAA TCTAGGGAAA TTAAATGAGA
AAAATACATG GIGIGTGINT TGGAGGGGGA GCTGGAATTG GAATGGGCTG GAGTGATGAA AAAAAGCCAA CAGATATAGT
CTTCTGTTTT GTAATATAGG CTCAATACTA AATTATGTAG GACTAGATAA TCTAGGTCCT AATGTCTCCT TTTTGCTGGC
AACCTGGGGG CCAATTACAC TAGAGGGTTG GTAGAAAAAA GAGGAATAT

## SEO ID NO:1329: (Length of Sequence = 364 Nucleotides)

TTGTATATTT GGGATTGTCA ATAATCTAGG CCACGTGGAA GATAACAGGC TATTTTGGAT ATTTTACTAAT TGCAATGGTT ATATTTTCTGT GTAAATGCCT ATACAAATGT TTGCTTGGTG ACATATGGAA AACTTAAGGA CTTTTTATGAA AAGGCGACAA TGGGGACCTC CAAAGCGCCA AAGTTTCTGC TAGGCATAGT GTTATTTTTA GATTACATTA AAATGGCTAT TTAGACCCAT

CTAGCTGAGA CTATTCCAAA ACAAACTTT TATCANATTG TNATCATAAT CAACTTTCTA CAGGCTAATG ACTTTATAGN TTTACTNCTA GTGTATATCT ACTAGCACAA TTGGACCCAG TTCC

SEO ID NO:1330: (Length of Sequence = 221 Nucleotides)

CAATATTTAA ACAAAATGCA AAACTGAACG TTACCTCAAA ATGAAACAGT GTGTGTACTG GCTGTTAGAA GTTGATGGCG GTCTACTGTT TGATATTCAC TGCCATCTTC CTCTGCCCCCA CTCTACCTCA ACTCGGGACC GCCTCACCTA ATGGTGGGCT TTGCCGCTTT ATGCCNTGTA GAGNAGACAC TGGGTAACCA CAGCAAATCA ACACGGGNTC C

SEO ID NO:1331: (Length of Sequence = 279 Nucleotides)

AATAGAGATA ATGGTCAACT CTTGAGAAGA ACCAAATGCT GGTGCCATCT TGGAAGTGCT ACATCACCTC CTCCTCTTAC
TTCCTTGAAC AGCAATATTT CTGGATTTCT TCTGCAAGCC CCAGGCAGTG CAGGATGCGT TINTTTTCAG CAGCCAGTTC
CTTCTCAGAG AACTGGCCCA AGAGTTTCTG GACAAATATA TTTTGATCTT TCAGAAATAT GTTCTNATTC ACTCCTACAT
TTGGCACATT NTCCAAGGGC CCAGACTTGA AATTGGAGG

SEO ID NO:1332: (Length of Sequence = 290 Nucleotides)

GEACEAGEAG ATGICTITIGG TEGACITEGG AAAGAGGTIG CIAGAAGCAG CAAGAAAAGG CCAAGATGAT GAAGTGAGAA CGITGATGGC AAATGGCGCC CCATTCACCA CAGACTGGCT TEGAACATCA CCCCTCCACC TIGCAGCTCA ATATGGTCAT TATTCCACAG CAGAAGTACT CCTTCGAGCA GGTGTTAGCA GGGATGCCCG GACTAAAGTA GACAGGACCC CCTTGCACAT GGCTGCAGCC GATGGACATG CGCACATCGT GGGAACTGCT TMTTCGGAAT

SEQ ID NO:1333: (Length of Sequence = 201 Nucleotides)

OGCCCAGCIA ATTITIGIAT TITNAGIAGA GACGGGGITT CATCATTINA GICAGGCIGG TCICAGACIG CIGACCICAT GATCCACACG CCITGGCCIC CCAAAGIACT GGGATTACAG GCATGAACCA CCACGCCCAT CIGATTICCC GITTICIGCA GGGIAAAGIAC TCAGGGCCGG CCCATTGMIT TCAGGANITT T

SEQ ID NO:1334: (Length of Sequence = 267 Nucleotides)

NNATAACTIT TIGITGAAAT TIAGAAAATG TGGATCITIT ATACTIGCTI TCCCTTTTCT TCTGCCATCT TIATCTTCTG
CTGAAGGAGA CAAACAATAT TITAGGTGAC ATCTATCACT TIATGTAGGA CCTGCAAACA CTCATGTTGT CTTCGGACAG
ACAAATGGAG AATGTAAATC TGTTACACTG TGACAGGATA TAATINIGGA TIGCATAGGN TINCAACAAA GTGTCTGTGT
GATGANIAAA TGGTAAAATA TATITAT

SEQ ID NO:1335: (Length of Sequence = 279 Nucleotides)

GENTETTETT AGAATGCAGA TICIAATTAA AAATGIGTAG GACAGGGCCI GAGACTCGGI ATTICIAACA AGITCCCAAG
TGATACIAAT GCTACTGCTT CACAGATCAC ACITTAAATA GTAAGGITCT TGAGAGAGAT TAGICTCAAG AGAAAAGAGA
CAAAAATCIC CAGAGCAGGA AGACCAAGAA AAAAAAATGG AAAGTAGCCA GTCGATTATC AACTAGATGG CCITAGTGAG
ATTICTGCACA ATATITCATC ATACAAAACT GNITTCCCA

SEQ ID NO:1336: (Length of Sequence = 398 Nucleotides)

TTTTTTAAGC ACTCTTGTGT GGACTGGTCA AAGATGTTCC TAAAACAACA TTGCTGTCAC CAAGCCTCCC ATGANTTAGG CTGGCTCCTC CCATGTGGAT ATCTGCTTCT GCATAGTTGG TGAAGGGAA GCATCCTCAG TCAAAGCTAC CAGCTGAGGA ACCCTTAGGA AACCCCGCTG GTACCTGGCC TGINITTTGT AAGTATACAT CAGGCCAGGG GGCTGCTTGC CAAGCAACAT CATTGACTGC ATACTGTTTA GTGCATGCAT TACCAGGGCT CAAACATCCA AGTGATGCTA CCTGAATAAG TCGAGGAATT TTTGATAATA AACATAAGCC AAATCCAAAA AAATGTTCTG GGTTTTTCCA TCATTTCCAC TCATTAGTNC CAGGAAAA

# SEO ID NO:1337: (Length of Sequence = 272 Nucleotides)

CTITCCTCAG TATCACAGGI ACCIGITTIN CIGGAATITA TITAAAATGI CACCITGTAG TGITCCCTCT CTAGGGCIGT TIGITTCATT TCCCICTGAA TGAATGCIGC CACACGGICA TATGIGAGCC AAGITTACAA GAATGGAGIT GCIGCIGAAG AGATCTCICA TICATCTCCC CCAGTGCCIG TCCTTCACAA TCATAACGIT ACCCTTGCTT GACAAATATA CTGTATGGCA AGTCATAAAG GICTINGAAC AGGACTTGAC CC

# SEQ ID NO:1338: (Length of Sequence = 212 Nucleotides)

TAGTCCCCTT TATATATAT AATCAAGTTC CTCCATCTGG GCATTCAGTT AAATTCTACA ACATTGCCAA AATCTGATTT GACTCTACAG AATATGTATA GTTTATTTAA CCAGATAGTA ATTTAAAATT TTACAACATG CGTATTTCAT GTAATATTAA TAACAGTAAT TTAAATTAAT ATTCAATACA TACCGTTTGA ATTTTTATAA GG

## SEO ID NO:1339: (Length of Sequence = 280 Nucleotides)

TTTTTAGGAA TAACAAATGI TTATTCAGAA ATGGATAAGI AATACATAAT CACTCTTCAT CTCTTAATGC CCCTTCCTCT CCTTCTGCAC AGGAGACACA GATGGGTAAC ATAGAGGCAT GGGAAGTGGA GGAGGACACA GGACTAGCCC ACCACCTTCT CCTCCCGGTC TCCCAAGATG ACTGCTTATA GAGTGGNGA GGCAAACAGG TCCCCTCAAT GTACCAGNTG GTCACCTATA GCACCAGCTC CAGATGGCCA CGTGGCTGCA GCTGTACTCA

# SEQ ID NO:1340: (Length of Sequence = 324 Nucleotides)

CTGTTCCACC TCAGATCATC AGGCATTAGA TTCTCATAAG GAGTGTGCAA CCTAGATCCC TCCCATGTGC TGTTCATAGC AGGATTTTGCA CTCCTATAAG AATCTAATGC CACTGCAGAT CTGGCAGGAG GCGGAGCTGA TGGTGGGAAG GTGGTATTTGC TCGC JUTC GCCTACTGCT CACCTCCTGC TGTGGGGTCC AGTTCCCACC ACAGACCACT GGTCTNTGAC TCAGGGACCAC CTAC JCT AACANGGNTG AGGAAAACAA CTGGGTTCAT CACACAATTA TTTTAAAGTT CAGGTTTTNC AAATAACTTA

# SEO ID NO:1341: (Length of Sequence = 376 Mucleotides)

CTAATCAAGG GTACAAGATG TCTAANTCAA AGGCCCAGCT CTGCCTACAA GTCAAATATC TAGGCCTAAT CTTGGCCAGA
GGAACCAGGG CCCTCAGCAA GGAATGANTA CAGCCTATAC TGGCTTATCC TCGCCCTAAG ACATTAAAAC AGTTGTGGGG
GTTCCTTGGA ATCACTGGCT TTTGCCGACT ATGGNTCCCC AGATACAGCG AGATACACTC TAAGGAGACC CAGAGGGCAA
ATACTCATCT AGTAGAATGG AGACCCAGAG GGCAAATACT CATCTAGTAG AATGGGGACC AGAGGCAGAA ACAGCCTTTC
AAAACCTTTA AAGCAGGCCC TTCTTNCAAG CTCCAGCCTT TAAGCCTTNC CACAGG

# SEQ ID NO:1342: (Length of Sequence = 335 Nucleotides)

ACCCTTCCCC ACTCCTGGT CCCCGGGAGC AGCTCCTTCT GCCCGANTNA CTCACAGTGC AGGGAAAGGA GGCAGGGAAA
AGACCAGGAT TCTGTGAGTT CTGAGGTTGC CACACACAAA GAAGCTGTGG TTTCTCTGCC TCGGCCACTG ATGAGACTAA
AACTGGCTTC CCCTTGGAGA CGGCAGATTT CAGGCTGATC CCTGCTTAAG CCCTCTCATC CCCACGCTGG TCCTGGTATT
GATACAAGAC CCAGCTGGTG ACAAAGCCTC CAATCCTGGG GGTCCACGGA GCCTGGGGCT GANATTTCCA GGAACTATCC
GCCAGTGGGC GCCCA

SEQ ID NO:1343: (Length of Sequence = 379 Nucleotides)

GAACCCAGGA GGCGGAGGTT GTAGTGAGCC AAGATCGTGC CATTGCACTC CAGCCTCGGC AACAAGAGCG AAACTCCATC
TTAAGAAAAA AAGAAGGGTG TGATAGTTAA ATTTATGCAT CAACTTGGCT AGGCAATGGT GTCCAGATAG TTGGTCAAAC
ATTATTCTAG ATGTTTCTGT GGAGGTTATT TTTTAGATGA GATTAGCCTT GTAAACTGGT GAAAATTGGG TGAAGGAGAT
TACCCTGCAT AGTGTGGTGG GTCTCATTTA ATCAGCTGGA GGCCTCAATA GGGAAAAAGA CTCACCCTNC CCTGGAGCAA
GAAGGAAAATT CTTGCCCAGC AGAACTTCTT NGGGCAGCAG AATGCAACCA TAAACTCTT

SEQ ID NO:1344: (Length of Sequence = 400 Nucleotides)

GACGGATGGG ATCGGGGCTG TECTCTGCAG GTCCTCCCCA GAGATGTTGT CATACTGCGA GGGATGCCGC TCGTAGGACA
CCCTGCAGCC AGAGCCGTCC GCCGTCTGGA AGGCTGCGCT CTCCTGCGCTTC TTCTCGGGGA GAGCAGGTGG CGTATCTNYN
TGCTGCCCTG GGGCCAGAGG TCCGTNTGGC TGGGGATGCC CGCCAAGAGG CAGCTGGAAA GGAGGGCCCAA GAAATGGAGA
CCCAGACTCC CCCAAAGACT CTGGCAACGG GCTAAGGTTC CAGGGCCGTC TGCTGAGGTA TCTGGTCTGC GTTAGAGAGG
TCTTNCTGGA GGAATTCATA GTCGGGATCA TAGCAGATCT TGTCCCCTTT CTATACCATC TGTCCTATTT GGAGATNGCT

SEQ ID NO:1345: (Length of Sequence = 347 Nucleotides)

SEO ID NO:1346: (Length of Sequence = 287 Nucleotides)

CAAGICAATA CCCATAATTA AGICAAGTIG CCAGCCITAA TIATATTINI MICICGCICG TICACICTIC CICTCCTICC CICCTICCCT CICTGCCCCA CCCCCGIGIA CATTATATAC CAATTCATIG GAGATATATA TATGINIGIN INICAGINIG TGIGIGINC TGIGIGIG TGIGIGITAA AGAAGCAGGA TGICTIACAC AGATGITICA TATATTGAGG NATTACAGAG TAATTACAGG GAAAGGIATT ACACTGITCT TCAACACCCT AGGCAGT

SEQ ID NO:1347: (Length of Sequence = 295 Nucleotides)

ATTAAACAAC TITTITAAAC TITTIGIGCA CAGGACAGAA AACTGCCTGI ACATGCTATG TCCACTTTTG GAACACAGAT
TITTIAACAAT TATGAATGCA CAAAATCTTA CATATCATGC AACTCTATGC CAAGAACCCA ACTTTCTTCC ATGCAACAGA
TATGAAGATC TAAATGGAAA CCTAGCTAAG TCTTAAACAC TTTTCCAGTA GCAAGTATAA TATATGTTGI TGAGGGAAAA
CCAGTCTTAA CAATINCTTG TACACAATAT TCATGTGCCA AATACAATGN CAGCN

SEQ ID NO:1348: (Length of Sequence = 332 Nucleotides)

AGRICCCIGCT ATGIGGATAT TIGGTAGCAA TGACTGATGI GGAAACIACA TATGCAGATI TIATTGCTIC AGGAAGAACA GGIAGAAGAA ATGCAATACA TGATATCCIG GTTTCCTCIG CAAGIGGCAA CAGCAATGAA TIAGCCITGA AATIAGCAGG TCTTGATATC AACAAGACAG AAGGIGAAGA AGATGCACAA CGAANITCTA CAGAACAAAG TGCRGGAAGC CCAGGGAGAA GCAGCAAAAAT CTGAAAGCTI AACACCCCAC TITGACCCIC GGCCACACCT GAAAATGICT CAAATCTCCA GGGRGIATCT GGGAATGCAT TI

SEQ ID NO:1349: (Length of Sequence = 296 Nucleotides)

GCCCCAAAAA CAATGACACA AAATTCATTT GGTTAATTCA TGTAAAGGAA AAAACAGCAA CACCACCACA CAAACAGGAA AGTGGGAGTA TGATTAGGAG GGGTGAGATG AAAACTATTT TACAGTAACA TTTCCACCAA AAGACTGTCC TAAGAACACG CTGTCAATAC AGTTCACAGG GAAAAAGCAA ATGTGGTATT TTTTTGTATT TTTTAAAAGC TCCCTGGGTC CCAGGTGTTT
TGCAGTTTTC AAGGNCTTAT CTGCTAAAGG AATGCCCTTT TAGGGTCACA GCAGGT

SEQ ID NO:1350: (Length of Sequence = 317 Nucleotides)

CTGITGCCCA GGCTAGAATG CAATGNOGIG ATCITGGCTC TCACTGCAAC CTCCACCTCC CAGGITCAAG TGATTCTCCT
GCCTCANTCT CCCTAGTAGC TGGGATTACA GGTGITCACC ACCACGCCAG GCTAATTTTT GTATTTTTAG TAGAGAAGGG
GTTTCACCAT GITGGCCAAC CTCGAACTCC CAACCTCAGG TGATCCACCT GCCTCAGCCT CCCAAAGTGC TGGGATTACA
GGCATGAGCC ACTGTGCCTG GGCCAATAAA CTATATTTIN TCAAGCCAAA GTAGGACAAG CACAGTTTTT AAAAGGG

SEO ID NO:1351: (Length of Sequence = 349 Nucleotides)

CGGATGGGIG GGATGAGACT TCAGCTITAT TGGAAATGIT TTATITCCTT ATCTAAAAAA ATACIAGAAA GAAATACAAC AAAATGITAA CAGITGITAA TGTCGGCCTC TGTAAATATA GATATIGIGI TACTITAGTC TTITITITIAA TCTCAACTAA ATTAAAAAAAG GAATTITAGT CTTTTTTTAT CTCAACTAAA TTAAAAAAAG AATTITAAAA CCCTAGIGIT ACATGCAAGT GAGICCAATA ATGGCAAAAT AATAATGAGG NTACATAGGA AGGGIGACCT AAATTITAAT GGGIGAATAC TGGGICCCCG GTACAAGTTT GANAAATTIT GAATTICCG

SEO ID NO:1352: (Length of Sequence = 304 Nucleotides)

TTTTTATACT ATTTAAAAGA ATCCTTAAAT GATGGTATT CTCTAAAGCA TGCGGGGCTT AAAACCTAGA TGATGGATTG ATAGGTGCAG CAAACCACCG TGGCACATAT ATACCTATGT AACAAACCTG CACATTCAGC ACATGTATCC CAAGACTTAA AGTAAAAGTA AAAATTAAAA AAGATGGGTA TTCTATATTT ATCTTTCATG TTACATTTTT CTTTGTGGGG TTTCTAAATA AAACTTGTAA CATGAATGTT TTATTCTCAT TCTGTATTTT AAAAAGAAGC TGAGTAACAA AAGG

SEO ID NO:1353: (Length of Sequence = 307 Nucleotides)

CTTAGTCTGA CATTAGGTTA TGAGAAGTAC AAAAGATCCA CAAGTACAAA AAAATCTGTA TAGCTTTGCG GTAGTTGAAA
AAAATGCAAG AGAACAAAAA AATTTTTTGA GTAATATTCA TCTCTGCAGA TCTGAGTGAC AGTCCGCTTG AAACACCGCT
GTAAAAAGTGG TAAAAAATGA TTTCATTGTG ATTATGTTAA AATTTTTTGAT GTCTCTNTTA CTTGTTTTAG GGGAATCTGG
TCTTCCTGNC ATTTATACCT GGATANGINC CTTTCCCTGT AATTTTTNCT GAAAGGCTCC AATTTCC

SEO ID NO:1354: (Length of Sequence = 407 Nucleotides)

GTGAAGTTAA GCAGCAAGGG CTGAGAACCG CTGCTCCAGA GAGGCCAGGA GGTCTGGTCA GAGGCTGGGG CCCCAGCCCC CAGGCACCTC TCTGTGTCAG TTTCCCTGGA GAAGTCATGA GTTTGAAGAG TAGGCAGAGG CCAGGTGTCA TCACTGAGTC ACTCATCAAT GGCCAATGAG AGTNCAAAGG GTAGCTCTGA GCACAGGATG TNTAGCAAGA CTCCTGGGTT CAGCTCCCAG TCCCCACCANT GCCAAGTGGG GGATCCTTAG CAAGGTACTT ACCTTTTINN TGCCTCTGTT TCTACGGCTG CAAAATGGGC ACAATAATGT CAGATTCATG AGGGATAAAA TTAGGNTAAT TNCCTATAAG CTGCTTCTAA ACGTATTTAC TTATAAAA

SEO ID NO:1355: (Length of Sequence = 355 Nucleotides)

ATTACTATT GCCTCTATAG GAGGITICAT TAGGCATCIN CITCATTATG AGIGCAATAT AATCAAACAC TTATCAGTAC AAGGCAGAGA GACCGGGACT AGCTGCCTAC ACATCCTCAA TGAGCITTAG GAAATGTGAA GGAAACATGG ACTGAAAATC TTCTGGTGGC AGGTACTCTC ATGTGTTGTC CTATCTGATG CTCTCAACAA CCTCTAGGGG TAGATATTGT GACCCTCATC

TTGCAGAAGC CTTGGCTCAA GTATATGCTC AGAATCACAG AGCTGGAAGA TAAACTTGGG TCTCTCTAGT GCCAGAGNCC ATCNCCTCTG ATCTCTCAAG GGCAGAGGTA TTACC

SEO ID NO:1356: (Length of Sequence = 406 Nucleotides)

TTITITITAG TIATITCACI CICTCTGITA AATITATCIG ATAGGATICI GCAGAGAACA AAATICAACA GGGCCCIGIG GAGCAAGGAG CCCCTITICC CIATCTCCIT CCICTAAGAG CTACACCCAG ACCAGCTGGI TATCAGCGGA GGCCCCGCTG CTCCTCATGA GAACGCTGGI GGAAGACGAA GGIGATGGCA GTGGAGGCAG CATCCCAGGC AGCCTGGAGT ACCTCATCCC GGAGCCCCCA CTTATCAGIG CAGIGGITCC ACCCTGCCAG GGICINAAGI GCAGTCAGAA CCATCAGGG GINGCCGGAT CTGACGGCIG TINACACAAC GICGGCAGIG CAAACCTAGG GACAGAAGGC ACANCINAAG TCACINCAGA TCCCATCTTC CTACTG

SEQ ID NO:1357: (Length of Sequence = 231 Nucleotides)

TITCACAAAG AATITATGAT TGCTTCACCA GGTCACTAGT GAGCTAAAGT CAAGGAATGA CTACAATCTT GTAGCATTTT
AAAGTGATTA GAATTTGAGA AACTTTTACT ACATTATGTG TTACTATCAT AAGAACACTC CTTTGGGGGC ATTTGAATAA
TAAAAAGGCC TACATTCTTT GCACCANGTG NTCATTTTCA CCCACATTCC AGTATTTTNC TCTAACTTGG G

SEQ ID NO:1358: (Length of Sequence = 302 Nucleotides)

CACAACTAAT TTGTAAGCCC CTTGAGCGCA GGAACTGGTT TTTTAAAGAA TGATGTATTC TTCACAGTGC TTTCCCTTTC
TGTTACCCAG GGAGCACATG GCAATATAAG GGCTCCTGGG ATTGANTCTT AAGTACAGAG AAAACCTAAG AATNCTTTTA
GATAGACAGA TAAGAGACCA CNAGAGAAGA GCAGATTCTA AGGTATNTGT GAGAAACGTT ATGTAATGAA AAGATAATTG
ATGACACACA CTTCCAGAGA GIGCTGGCGA GATTTGATTC AAAAGCACAC GGCTAGGGCA CT

<u>SEQ ID NO:1359:</u> (Length of Sequence = 356 Nucleotides)

TAATGATGAG CCTCTGGGTG CAGGGAGAGG ATAGGACTTG ATGCTTTCCA GGGGAAATAT TTAAAATTTC AGTACTAAGT
TAAGTCTGTA TCATTTTACT TTTTTTATAG TTTCTTATTT TATGTTGTAT GAGATGAAAA GCTTGCACAT AAAAGATGAT
AAGAAATTAG AATTCATCGT TTCTGTTGTA CCAAGAAGAA CCTTAGTGAT CTCTAAAAGA ATTGTTGTTA AAATATGGAT
TCINCTTTCC TTCTAGTACT CCCCTAGCAT GACANTGAGC GTGTGATCCA TTACCAAGTC TCCTCATGAA AACCACAGTG
AGTCAGCCCT TCACAGAACT ACTACGGGAG GAAATT

SEO ID NO:1360: (Length of Sequence = 366 Nucleotides)

SEO ID NO:1361: (Length of Sequence = 347 Nucleotides)

SEQ ID NO:1362: (Length of Sequence = 358 Nucleotides)

CCATTCATTC ATTCATTCAA CAATATTCAT TCAACAAATG AAGCAAAGGA GCACACAGCC AAGTGATGGA GCAAAATCAC
AAATTAAAAG GTAATTCAGG CCAGGTGAGG TGGCTCATGC CTGTAATCCC AGCACTTTGG GAGGCCGAGG CAGGTGGACC
AGCTGAGGCC AGGAGTTTNA GACCAGCCTG GCCAACATGA TGCAACCCCG TNTNTACTGA AAATACAAAA ACAAACAAAC
AACATAAAAA AATTAGCCAG GTATNGTTTG CAGGCGNCTG TAATTNCAGC TTAGTCAGGA GGCTTTGGCA NGGGCTTCAG
TTAGCCCAAGA TCGGACCCTT NCACTTTCAG CCTGGGTA

SEQ ID NO:1363: (Length of Sequence = 312 Nucleotides)

TATTTAAATA ACGIGCAATT TCATAAATCA GCACATITAC TAGATAGGTA GGATACITIT NATCCATTIG TGIGITAAAA
AATTAGCGCA TGITTCICIT TATGCCCACT TGIATTAGCA GAATAGIGIT TICGGATICC CIGAATGGNI CIGIATIGAG
TCIGIATAGA CCCCGAAGGA AAAGGAGGAA TICGCCGIGC CCGAGAATAG CICCGICCAG CAGITTANGG NAGAAATCIC
TAAACGITTI AAATCACATA CIGACCAACT TGIGITGATA TITGCIGGAA AAATTITGAA AGNICAAGAT AC

SEQ ID NO:1364: (Length of Sequence = 345 Nucleotides)

CTGACAGATT TACAGATECT GACCTATTGA AAAATACCAC AGCCAGAATG GGCTAAACAG GTATATAGIT AATACAACCA
CCACCATCCT TTACTTTAA CATAGCTCTT AGTAGGAATT TCATAAAANT GGACATCACA GCTAAAATGC ATTATTAATT
CTCCTATCTG CTGACAATAA AAAAGCAGCA AACTCACTGA TTTCTATTTA AATGCACTAG ATGGGAATAT CATGITCTAG
GGGTGTTTGC CTTCAAACCA AACCCACAGC AACACACAC AGCAATTTCG GTATCCACCA TTTTAAATTC ACAATCTGAG
NCTAAATGAA TGGCTATTTA TATTT

<u>SEQ ID NO:1365:</u> (Length of Sequence = 255 Nucleotides)

CTCCAGAAAG CCATTGATCT GGTGACGAAA GCCACAGAGG AGGACAAAGC CAAGANCTAC GAGGAGGCGC TGCGGCTGTA
CCAGCATGCG GTGGAGTACT TCCTCCACGC TATCAAGTAT GAGGCCCACA GCGACAAGGC CAAGGAGAGC ATTCGAGCCA
AGTGCGTGCA GTACCTAGAC CGGGCCGAGA AGCTGAAGGA TTATTTACGA AGCAAAGAGA AACACGGCAA GAAGCCAGTC
AAAGAGAACC AGAGT

SEO ID NO:1366: (Length of Sequence = 322 Nucleotides)

AAAAAAAAA TTCCAAAGAA ACAGAGTAAT TTTCCTCTT GCCTCAGCCC TAAGTCATCT CCCAGACAAA AAAGCAATCA
TCATTGTCAA ATTTAAAAGG GAAAAGGAAA GACTTTATT TGANIGAAAA GATTTTTTTC AGTGTGATAG AGAGGGAAGA
CTGAAATAAA CAGAATTTAC AACCTTCGCA CCTTTGCACC TTCCTCTTCT AGCAGTATGG CAAACTAAAT AACTTGCACT
GAAAACGGGT TAAAAAGCTG TATACTTTTT TAAAAAAATAT ATTTMGNITA TGTCATTGAT CTGCACAGTT TTGAATACAA
AA

SEO ID NO:1367: (Length of Sequence = 349 Nucleotides)

GAAAACAAGG TCAACATCAC TCATCATTAG AGAAATGCAA ATCAAAACCA TAGTGAAATA CCATCTCACA CCAGTCAGAA TGGCTGCTAC TAGAAATAAC ATGCTGGTGA GGCTGCAGAG AGAAAGGAAT GTTTATACAC TGTTAATGGG AGTTTAATTA GTTCAACCAT TGTGGTAGAC AGGTGAAAA TTCCTCAAAG ACCTAGAGAC AGAAATACCA TTTGACTGAG CAATCTCATT ACTGGGTATA TAGCCAAAGG AATATAAATT GTTCTACTGT AGAGAAAACA TGCATGCATG TTTGTTTGCA GCACTATTTC ACAAGAGCAA ACACTGGG TCAACTTAA

SEQ ID NO:1368: (Length of Sequence = 379 Nucleotides)

CIGGGACAGA GACCITIGCA TIGCTCCATG TGTTGGCITC AGCTGGGACA GAGACCITTG CATTGCTCCA TGTGTTGGGG
CAGGTCTTCC ATTTCAATCT CCTCTGCCCT AATTTATTAG CCATACTTGT GCTATTTATT ACTTTTAAAC CCTAATCCTT
TTTCCGTAAT TIGGTTTACAT TTTGCAGAGT GCCAGCATTT TACAATGTGT CTTTTATGTC TCACAGAGGT CATCATTAAG
TTAGACCTTT GGCTTCATGT GTCTCCCGAG AGATGGTTTA TAAAATTTGC ATNCTTCTGG CACAGGTGGT GTGGCTTAGG
GATTAGGACA CAGCCTGCCT GAGTTCACAC CTCATCTCTC CCACTTAACA CTGATAATT

SEQ ID NO:1369: (Length of Sequence = 319 Nucleotides)

ATTICIGGIC TAAGITTIAT TATITCCTIT CITCIGCIIG TITTAGGCIG ATATIGCACI TCITACTCA GITTICIAAG GIGGAAGCII CGACIATIGA TITCAAATCI TITIMCITIN CIAATCIATG CATTCAATGI TATAAGITTC TGIGAAGCAG TGATITCATI GCATCCCACA TITIGATAGG TITATATITCC CAAATATITA GAGATTIGCA GCIGICTITA TGITATTAA CITIGACITA TGIGTIATIT GGAAGIGIAT TITIATICCC CAAATATITA GAGATTIGCA GCIGICTITA TGITATTAA

SEQ ID NO:1370: (Length of Sequence = 343 Nucleotides)

GGAAAACATA AATNITGACA AGTAGITCAA GACIGITGGG ATAAACITAG CTAGAGTGCA GGTCATAACT ACCCATCITT
ATAAGGAAGC TGAAAAGGGA AGTATGAGGA CAGGGAGAAC AATGACTITN TCTCTCAAGC TTGACTTAAA CCACCAGGAA
AGTTCTTAAA GCCAAAGCCT TTCTCAGACT CTCACCAAAC CATAAGAGTC AGAAAAATGG TCGTTTTCAA AGGAGTAGAA
AATTCTGTAC AAAGTAAACA ACACCTGAAG CAGGAAAGGN ACATACATTT NNTCACTTAG TGGCACGCAG GCAAAACAGA
ACATAGGGCC AGCTTGGTTA TTT

SEQ ID NO:1371: (Length of Sequence = 295 Nucleotides)

ATTICINCCT GGGGGGGAT GATCIGAGCA ATGCCCCCCA CAAACTIGGI TITCACTACA ACATCGICGI CATCAGCITT
GCCAAAAAGCT GCCTTCTGGG CTGCACGGAC AAGATTGINT GAGGCTCTIT TCACAGCATT TCCTGCCGCC TGIAGCCGCC
TCATGGCCTC TNAATCCTGG TCGGCCTTCA CCTTGCAGGC CACCAGCAGC TGAGCCGTGG AAGCGGCGAC CTGCTTGGCA
GATGAGATGA GCTTCTCCTC GCTGGCGTGT CCCTGAACGG AGGCATTGGC CGCCT

SEQ ID NO:1372: (Length of Sequence = 340 Nucleotides)

TITIGCTITCA GATAATGITI CIGIATACIT TATAAATGCI ATCIGIGGIA TCTCCIGIAT AATINACAAT GITIGCATGI
AAAAAACAAA ACCCATAGAC CITAAAAAAA AGAAAAAAAG AAATATACAC TATACATAGG CACAGCITAT GCCCAGAGCA
TAGCAGGIGC ATAAAACACT GITGCTATAA ATGCAAGAAA AAGGICATIT AACCACAATC ACATITITITI NCATAAGNON
GICIGAAATC TATACAATAT ATACATCIAT GITICAATGI GGAAATAATA TTCTITTAAA TITCAAGGCG TGTIATACCC
CIGCAGGCCT GCATAAATGG

SEO ID NO:1373: (Length of Sequence = 315 Nucleotides)

SEO ID NO:1374: (Length of Sequence = 327 Nucleotides)

GAGCCAGTGG TGGCCCCCAA CAGCCCAATC TGGTACTCAG TCCAGCCTAT CAGCAGAGAG CAGATGGGAC AAATGCTGAC

GCGGATCCTG GTGATAAGAG AAATTCAGGA GGCCATCGCA GTGGCCAATG CAAGCACTAT GCACTGAGAT GCCTTGGCCA

AAAGGAAAAT ATAAAAGAAA ATAAAATCTC ACATTGGTGC TTAGCAGGAG AATTTTTAAA GACTTACAAA TCAACAAGCT GTTCAAATAA ATAATGAATG CTGCAGCTGG CTCTTACATG GGGCTTTNAG TGTCCCANTA GTAGCAGATG TCCCAGTTCT ATAAAAT

## SEQ ID NO:1375: (Length of Sequence = 338 Nucleotides)

TGCATGGAAA CITAATCTAT TCAGGICCCA ACTITCAGGC TTCICTGCTC TGACAAGTAC TAGAGGCCAA TATGATAGAC
TAGTCTGAGT TGGATGCAAG TTAGCCATTT CCAGGAATGA TACCAGGATA AGTATAATGG TCGTGAATAT AACCGGATTT
TAAGGGAGAA TGATTACACC TGGAAACAAA CTGTCAATAC ACAAGTAACT AGTTGITAAA GATTTCTAAT TTTGACCAAA
GATTTTTACT TTCCTGGTAT AGAAATGGAA ATAAACATIN ACACTTTAGG TTTTGAAAGC AACCACCTCC TAACACGGTT
CTGAGTTGGG GGCCAACA

## SEQ ID NO:1376: (Length of Sequence = 307 Nucleotides)

CAAGCCTCCC TCAAAAAAT CCCCAGAGTA ATGAAAATAC AAAGTCTGCT TGTTCAAAAT TATGGTGCGA ATAAAAAAAGG AAAGGGAGGA AGTGATGGAG TAAAGTTCAG ATTAAAAATA AACGGAAAGT CACAACAGTC GAAAGGTGGA AAAAAAACCGC AAATGCCCCAT GANCTGATGA ATGGATAAAC AAAATTTGGT GTGTGTAT ATATGTGTAC AAACTTCCTT TTTATGATGA AATAGTATTT CATTGTGTGT GCACATGTTN CACACACANT TTAAATAGTA TTTCGTCATA AAAAAAG

# SEQ ID NO:1377: (Length of Sequence = 353 Nucleotides)

TGGAATACAC TIGIGAATAC AGIGIGIAGG ATACATTAAC AGITTICIGA GIGGGCIGCT CITITITICCT CAATACIGIA
TATATITINN TIAAGCICIT CITTAAAAGA TAAATATITI TCATACITCI CITAAATCCI CAAGGATTAA CICIGAGICA
CCATITIGIGG TATITIAAAT CCITITAAAT AAATCICIGI ATTIGCAACI GCATCAAAAC AGIAAAACAT TICACAGGGI
AGGATCIGAT GACCATITTA TAATCAACAT TITTAGGIAC CACAAGAG "ACITTATGAG CATCCACIGA AATTATGGGC
ATTATGICAT ATAAATATCC AAAAATCCAT TIT

## SEO ID NO:1378: (Length of Sequence = 315 Nucleotides)

GATTICGCAA ATATTICGGI GAGATTIGAA AATAAATTAC ACCACTGIIG CACAAGITAA TGIGAATCAA GCATCTGITT
ATTICATTCA GITTATGCCI TILTITICITT TTTIGIGCAG TGCAGTTGGG GTCACAGACT CTCAATTIGA CAAGACACTI
TAAAAGCAGG AGTAGAAATT AGGCIIGGGI TTCAATATTI TCCAAAAGAT TCTCCCCATA TAGAAGTCCC AAAAG

#### SEO ID NO:1379: (Length of Sequence = 352 Nucleotides)

ACCECAAAAT TTAGCTGTT ATTAGGTGC AAGTCTCCC TTCTCTCCCT GCTTTCTCTT TCTNCTTTTT CTCCCCACAA
ATCCTCTCAA AACACATACA AAAAGAGAAA ACTAGAAGCA AGATTGGGTC AAACATGAAG AACACAGAAA GCNTATTAAA
TAGCTAGCTT TAAAGGGCTC TTTTTCAGTT TGAACAAAAG TAAAACGTTC TCAAAAGCAA AAACAGAAAA CAGAGCTTCC
ACCCAGATTG TGCAACTTAA TGAGAGGAGG TTAGTGCTGA TAAACCCATT GTGAAATCTA TTATAAAGTG ACAGGTTTTT
CAAGCAAGGA AATCCAATCC AGTTGGGGGT TG

### SEQ ID NO:1380: (Length of Sequence = 261 Nucleotides)

AAAAATTIAG TGAAGACGTG AATAGATATT NCTGCAAAGA AAACATACAA GTGGTCAATA GGTATATAAA AGGTATTCAA
TATCACTAAT CATCAGGGAA ATGCAAATCA AAACCACAAT GAGTTATCIN CTCATACCTT TNATGATGGC TAATATTAAN
CGAGAGATAA CAAGTGTTTA TGGGGGTGTG GNGAAAAGAG AATGTTCGAA CACTCTTGGT TGAAATATAA GTTGGTAGAA
CCATTATGCA AAACAGTATG A

SEO ID NO:1381: (Length of Sequence = 273 Nucleotides)

GCCACTACAC TCCAGCCTOG GACACAGAGC AAGACTCCCT CCCAAAAAAA AAAAAAAAA TTATTAGAAA GAGGAAGAGA GAGATGACAA AGCCTTTTAC AGTTGGGTGT TGGGAGTTAG AGACCCAGTA CCCCAGCCTG ACATACCTAC AGAAGCAGTG AATTTACTTA TTTACTGTTA TGAAAAAAAAT AGATGCTGCC AGCCGTGCAC AGCAGAAACT ACTATTGANT CATATGGTTT TAGCCTTCAC CTTTAAATAT GTCTAATTAT ATG

SEO ID NO:1382: (Length of Sequence = 296 Nucleotides)

CTCCACAGCT GCCACATAGA ACAGCAAAT CTGACATCAC AGCTCTTTTA AAAATCTCCC AGAATTCTAC ACTGGAATAA
AGATCACCCA GTAAACTCAG CTATGTTGAT TCGTAGGAAT TTCTCCTTGG AGTTAATAAT AATCATTAGA AAAAAAATAC
AGGAAGAAAT AACTTCCTCC TATTCTTATT GTGATAAATT GTAACAATAG CAGACATTCG TATATAGATC CTATAAGCGA
CAAGAGGGAA AATAGGATTT GCAANTTAAG CATCTGGAAT AAATATTTTTA GGAAAA

SEQ ID NO:1383: (Length of Sequence = 293 Nucleotides)

CCAAGGACCG GGCCGTGCGG CTGCTCTGGG ACCGCTTCGT GCGGGGCTGC CGCGCCGACT GGTACGGAGG CAATNACCGC
TCGGTCATCT GCTCTGACCA CTTTNCCCCA GCCTGTTTIN ACGTCTCTTC GGTTATCCAG AAGAACCTGC GCTTCTCCCA
GCGNCTGAGG CTGGTGGCAG GCGCCGTGCC CACCCTGCAN CNGGTGCCCG CCCCGGCACC TAAGAGGGGA GAGGAGGGAG
ACCAAGCAGG NCGCCTGGAC ACGAGAGGAG AGCTTCAGGC AGCCAGGNAT TCT

SEO ID NO:1384: (Length of Sequence = 378 Nucleotides)

GGIGGITTIG ACATGIAGAA AATAAGATGG AAGGCTGAAC TAGGGCAGTG GTGITGGCAA ATAATCAGAT TTCAGGAATA
TCACAAAGTG AGGAGCCCAG GATTCATGAC CATTITNATG TAGGAATAAG GGAGGAGCCT AGGATGACTC CCCCAAGTTT
CTGGCTCGAG TAACTGGGAT ATCAACAAGT CATTTAGCAA AATAGAGAAA ATAGGAGAAG CAGCAATTTG AGATAGAGAT
AGAGGCAATA TAAAGNNITA TATATTGACC ATGGTAAATC ACCTAAATTC AGAAAAGTTGT AGAAAACTTG GGTCTGGANC
TCAGGAAAGA CACTGGATAT GTAGATTTGG AAAGTTATCA ATCTCAAAGT GATTGCTT

SEQ ID NO:1385: (Length of Sequence = 204 Nucleotides)

TCATTCTTGG GTGTTTCTCG CAGAGGAGGG NITTGGCAGG GTCATAGGAC AATAGTGGAG GGAAGGTCAG CAGACAAACA AGTGAACAAA GGTCTCTGGT TTTCNTAGGC AGAGGACCCC GAGGCCTTCC GCAGTGTTTG TTTCCCTGGG TACTTNAGAT -TAGGGAGTGG TGATGACTCT TAACGAGCAT GCTGCCTTCA AGCA

SEO ID NO:1386: (Length of Sequence = 238 Nucleotides)

CCCCATCATE GECAGCCAGA GCTCCAAGGC TCCCCGGGGC GACGTGACCG CCGAGGGGGC AGCAGGCGCT TCCCCCGCGA AGGCCAACGG CATGGAGAAT GGCCACGTGA AAAGCAATGG AGACTTATCC CCCAAGGGTG AAGGGGAGTC GCCCCTGTN AACGGAACAN ATGAGGCAGC CGGGGCCACT GGCGATGCCA TCGAGCCAGC ACCCCCTAGC CAGGGTGCTG AGGCCAAG

SEO ID NO:1387: (Length of Sequence = 295 Nucleotides)

TTTTTTTTT TTTTTTTTT TTTTANTAG GCAAGAAGAG GTGTGAGTAA TTGAGGAAAA ACTGACAGAT GCTTTTCCTA
ATACCAAAAT TGAGCTTACA ATTAGGAACT GAGTATGTGT AACAGGNTAC AGGTGACAGT GAAGATAGAA GAACCACGNT
GACCACAGAC TCAATGTGCT CTGTAACATC GCACAGTTTA CCCAGCATGA CTTTCCTTAG GAGGCCCCCT CCTCACGCTA
GAGTAAAAGT CCCAGTTAAG TGAAGCCTAC CAGAAGAACT AGTAGAAGAA GCTTT

SEO ID NO:1388: (Length of Sequence = 201 Nucleotides)

GCTAGINATC TCTCAGACAC TTGGTCGGTA GAAAAGATCC CGCACCATCC TCCAGGNTCC AATGGCCTTG GAGAGAGGGC TGCAGGGCCC ACGGNCATTG CTGACTCTTT AGAACGTGCT GACATGGAGC CAGACCACTC GGCCCTGAGT GCGGCGAGGA CCCINITINI GGATGIGGAG GAGCGCGGGC CGGAGCATTG T

SEO ID NO:1389: (Length of Sequence = 399 Nucleotides)

GGIGCCCTGT TATCTGGTAA AAGAGCCACT TATGACCTCA GGIGCTACTT AACCTGGGGG GCAATTGTTT CTTAGGCCTA
GCAGATGTTT GGGATGACAC TAAAAACTCA GIGGTGAGAT GATTCCCTTA GCAAGATTGC TGAAGTTAGG TTTAGACGTG
GGAGGGTGGG TATGTGAGCA ATGGTGCCAA TAGCGGCTCT TTATTTGCCT TGTCCTCATT ACTGCCATCA GGAAGGTGCT
ACTGGCCTCG AGCCAGGGTG TTCATAATCT GGCCTTGGGT TAACCAGACA AATAGAACTT CTTTTCCTAG ACTGTTGGCT
TTNTGGAGGT TGGCAGCCTC TATCACAGGN TAAAATTTCC CAAATCCATT TACCCAGTAT ATTCACTACA ATTTTTTCC

SEO ID NO:1390: (Length of Sequence = 381 Nucleotides)

GGATTGAGGT GAAGATACAA CAAAGAAAGG AAATTGAACG GAATTATTAA GAGGGTCAAG TITGATAGGC AGATAAGACT
AGGTATCAGC AAGACATTC AAACAAAAGG AACATTATGT AATTTTTTAA AAAAATACAT GAAAATAATA TITAANCAAG
GAAGGAATAT GATAAAAGAN GGATAGTTAG TAAAATTTGG ATAACATAAA GATTATTGAA TCTCCAGTCG TCAAATTTAT
CCTAAACTAC TGGGGAGAGG TCTCCATGTCA GATTTTGATT ATCGAGAAAG AGGGGTCAAG AGTATAAGNG AAATTCCTTT
TTGTTTTGAA CTTCCAGTGT CCCNCTATTG TGGGCAAATA TCAAATTCAA ACCAAATATA C

SEO ID NO:1391: (Length of Sequence = 327 Nucleotides)

GAAGAAGICC TICITAAGCA AGGCITACAG ACTCCCAGGG AGAACAAAAT CICITIATCI CICIGGGGIT TIAGGACCCI CATCAAGICA TAGAATIGAA ATAGAGAACA TCAATIGINC AACTITITAA TITTAATAGT TITTIGIAGIA CATAAAAAATC ATGTTATGAA TIATTITIGIA GITTTAATTA TAACTITITIT AGCACTITTA CCATATICIT AAAAATTAAA AATTATGAGT NCTGAGAAAG CAGIGAAATC ACATATAGGT ATTIGATTAA CITTTATGIG ATCTTTACC TCAAGCTAAT GITTCTTAAA ATCAAGG

SEO ID NO:1392: (Length of Sequence = 223 Nucleotides)

TTTTTTAATA TITAAAACAA TTTTATTCAT GAAAATATGC TGTACAATGC ACTCTACACA GCCTCGACAC GGCACACACG CACACGCACA CTCTGACGGC ACGGCCACGG TACACTGCCT ACGATACGCG CCGGGGACGC CGCGCCCACC GCCCGTCCCG GCCGGACACT TATAAATATG GGAGAAGGGC CAGAACTNGC GCGGAGAAAG GGGCGTCGGG GTT

SEO ID NO:1393: (Length of Sequence = 296 Nucleotides)

GAAAGITTAT TATTICCCAA TGINCITTAC ATTINCATIT GGAAATATCA TICCIGACAG AAATAGNIAC ATTATACCIT
CGAAAGCAGA AAGATCITAA TIAATIAAAA CAGITTACAT TIACCITAGC ATTAGGICIG GCIGGCIAAT TICAAAGGAT
TAAAAAATIGC ACCNATITGG GCCAACIGGG GICCIGAATA ATTATCCNGG GTAAAAGIAT AATATTICAT ACTITATACA
TITIGCITCA TCACACATIT ACTITICCACA CAGIGNICAA CITCACATIT AAAAAG

SEO ID NO:1394: (Length of Sequence = 281 Nucleotides)

ATCITICAT CCCIGGACG ATTICCAGIT GAGCATGGIG AATAATCITI TIGATAGGCI GITGGATTIG AGITGCTAGI
ATTITUTIGG GGCATTITGC ATCIGINITC ATCAGGGATA GIGGCCITCA GCITTCTTT CGIGIGIGIG TGICCCTGIC
TIGITCIGGI ATTIGGGGIAA TATIGGCCIT GIAGAATGAA TITAGAAGAA TITCCITTCCT TTIGATTITT TIGGAATAAT
TTAAGAAGAA TITAGIATTAG TICINCITTA AATGITTGGI A

333

SEQ ID NO:1395: (Length of Sequence = 323 Nucleotides)

CTTITITIA GATTICAAAC TGGGITACAC ACTGGAAAAG GCTGGGITAA GGGCCGAAAT TIAATAAATC TGTACTGATA
ACTAAAGGCT ACAGAGATIT CATATATITT TITTAACTIT TAGAAATCAG AGTGCTTATA AAATGGCTGG CTCATGGCTC
TGTCACCCAG CATCICTGAC GCCGCCTCCT AGCCTTCGTT GGTGAGATAA CCNGGNATAG TGATTCCATG CGTAAACAAC
AAGAATACTA AACCAATAAA ACTAGCTTAT CATGCAAATA TTANGGCATC TAGAAAGTCA GITAAAATAA TATTGTCATA

SEO ID NO:1396: (Length of Sequence = 384 Nucleotides)

TECCTOCOGE GITCATEGGA TICINOCGCO TCAGICTCIT GAGIAGCIGG GATTACAGGO ATGCACCACO ATGCCTAATT
TTIGIACTGA TECCAGCACT TICITAGCAA CCCCAGCIGG TGICCIAGIA TGCCCCCTCC AGTCCACTGI CTCTGGGCCC
AGTTCAGCGC TAGGACTIGC TIAAGAGTTI CAGTCCITGI AGCCTATACT GCCTTINACG TTTATTTAGA GATCIAGAGC
ACTTTAACCC TCAGTGGCAA GGITTGIGGG AACTTGAGTT CGGACCACTG GGATTGGCAA ATTCCCCTCT GGGCIAGGGT
TGCTTTAAAT GCTCCCTTCA CGIGGGGCA ATCAGCTGAG TTTGGTCCAG TTTTCCTTTC TGCT

SEO ID NO:1397: (Length of Sequence = 370 Nucleotides)

TTEASTITINT TCASTGGCAT CCCCTGCTCC CCTGAGCACA CACAGTGTTT TCTATTTATG ACTGTAGTGC CAAGCAGAAT
TTCCATGTIC TTGCTAGCTG CCCATTCTCA CCCCTCAGGG TCTCATACTT CTCCCTGGAA GCCTCCCAAG CAGTCAATGT
GACAGGGACC AAGTATGTAC AAGGCAACAT ATTGGGTTCA AGTGCAAACT AAGGGAACCA GGGCCTGTTT TTCTAGTTTG
GAAGTTTTTC TTTATCCTAA GAAAAGAGAC AGACCAAAAC CAAGAAGATC AACAATAACT CTTCTCTTTG TCATCACGGT
GATGACATCA AGGTACTGAT ATTAACCAGA AGTTACAACA AGAAGGAATT

SEO ID NO:1398: (Length of Sequence = 307 Nucleotides)

ATCAGCATTA GGITTICACC AAAGIGATAC AAGICIGAAG GICTICATCA GCAGICTCCC TCATAGICAG CGCCATACCG
AAGAGGCCIG TCCCTCTCAT AGGGCCITCC AGCCACINCT TCCCCACAGG CCTGATTCIN CIGTGGCIGG GAGIGIGGAC
TGATTIGITA TGATGIGAGA GATCCCNNGG GGIGIGAGCT ACCGCACCTG GCTGAACTIT CAAGGAGAAG TITGIGCATC
ANTITTCAAA AAATTATGAT ATCAAAAGAT AGCTGIGCCC TACATTIGGG AAAGATACAA AAACTIG

SEQ ID NO:1399: (Length of Sequence = 380 Nucleotides)

CTGAATTATT GAGGATGAAT TGATAAAGAC AGGTGTAATG AACTGAGGCC GGGCATTAGA CTGAGCAGCT GACTGTCCCT CAGAAACCAT AACCTTGCTA CCCGCATTGG GCATTGGAC AACTGTGAC ATCAATGCAG ACTGCAAGIN AGTTGGCAAA GCTGCTGATG TGTTAGCTGA AGTTGTGATG GGATTGGAAG TGACAAATAC AGTTATTTGA TTTGGGGGCCA AGGGAGINGA AATGGAGGAA GAGCTAACAG GTCTTGACAT TACTGGAGGG ATGCTTGGTG CAACGTTAGA ACTGACCTCA CTCAATTCGG GGATGCACAA GGGATGAACA CAGCTCATTT CCTGINAGGT AAGTTTAGGG AATTAGAAGG

SEO ID NO:1400: (Length of Sequence = 232 Nucleotides)

ATTATAGATA CACACCACCA CACCOGGCTC CTCACATTAA AGTGGGNTTA TGACCATGAA CACTTOGTAT TAATAAATGT CTCAGCACAC CCAAGCCTGA AAATCTGATC TAAACCTCCT TAACTTGAAT TCCATCCACA ATCCACAACT TNCTCGGNAA AAATNINICC CAGCTTCTCC TTCCTCTAGC CCAAGAAACA GCCTTAACAG CGNGCGATTT CATTCCTACA CT

SEQ ID NO:1401: (Length of Sequence = 349 Nucleotides)

AAGCTAAATT TATAATGAAC AGATTGAAGA AAAATAAAGA GCTACAGAAA GTTCAGGATA TCAAAGAAGT CAAGCAAAAC ATCCATCTTA TCCGAGCCCC TCTTGCAGGC AAAGGGAAAC AGTTGGAAGA GAAAATGGTA CAGCAGTTAC AAGAGGATGT

GGACATGGAA GATGCTCCTT AAAAATCTCT GTAACCATTT CTTTTATGTA CATTTGAAAA TGCCCNTTGG NTACTTGGAA CTGCTAAATT ATTTTATTTT TTACATAAGG TCACTTAAAT GTAAAGCGGT TAAAAGACAT CTTTNCINGC ATTGCCATCT TAATATC AGATATTACG GGATGTTAG

### SEO ID NO:1402: (Length of Sequence = 338 Nucleotides)

GTAATTGCIA TITGATGITA TITTAAGAAA TITAACCCITA AAACTITAAT TCCITAAAAC AATCICAAAC AGAAGAAGCA
AAAGCITGIN CTGTGCICCA GGAAATAAGA TICAGCACCA ATGAAAATAA ATTATAGAAA ATCAGAAGAT GGGTCAATAT
GAGTGGAAAA AACCTAACAT TITAATTGTT TITNCICTCA ATAATTGTG TGAACCATCC AAAAAAGTAT GATACAAAAA
TAGCACTATA CTAAGAGCCA GATGACATGT CCTTAAAGCC TTAGCTCTGC AAATTATTGG TTGTGTAACA CTAGGGAACA
ACACTTAGNC TCTCCTAG

### SEQ ID NO:1403: (Length of Sequence = 381 Nucleotides)

GGAGTCTCAC TITGITGCCC AGGCTAGAGT GCGANGGCGT GATCITNGCT CACCACAACC TCCATCTCCT GGGTTCAAGC
GATTCTCCTG CCTCAGCCTC CTGAGCAGGT GGGGTTACAG GTGCCCGCCA CCGCACCCAG CCAACTITNT GTTCTCAGCA
GAGAC GGGC
TCGCCATGT TGGTCAGGCT GGTCTCGAAC TGACCTCAAG TGATTTGCCC ACCTTGGCCA CCCAAAGTGC
TGGGATTATA GGCGTGAGCA CTTNCACCTG GCCTCTAAGC TTAATCATTT CTAGGCTTTT NATITAAAGT GAGAAACATG
TGACTCTTC CTTTCATTTG GGACACTTTA AAAGGGGTTA TTAAATTGAC CCTAATTACA A

### SEO ID NO:1404: (Length of Sequence = 325 Nucleotides)

AGCTCATCAG CTATCATTIG TGITAGIGTA TTINATGTAT GGCCCAAGAC AATTCINCIT TITCCAGIGT GGCCCAGGGA
AGCCAAAAGA TIGGATACCC CIGACAGGAT TOCAGGATTC TTITGIAAT: NCTCAGAGGC CCICTGTGCA TACICCGTAA
GGACTATCCA CATTCITTAT TACITTCATT GGCAATAGGI ATAAAATTIT ATTTGTIGGN TATTTTACTG NAATGTTACT
TGITTTTGCT TATTTACTGA TIGGGTGGGA GGAAGTCAAA GGATGAATAA ATCTAACCNI TTITAAAAAG GAAAGGCTAA
AAATA

### SEO ID NO:1405: (Length of Sequence = 349 Nucleotides)

GGATTATGAC TGAACGTCCT CAGCATGTTG GCCTTCACCC CTGGCGGTGG CTCGAACACA AAGATGCGGC CCGCACGGAG
CAGATTCACA GGCACCTTGG GGTTGATCTC CATGGTTAGG AAGAGTCGGA AGCAGGCATG CGGCTGCAGG GAATGCAACT
TCTTCTCCAG CTGCATCAGC CACCCTGGGG CCAGATGCAC ATTCTTCAGC ATCACCCACC TGCCCGANIT TACAAGCGGT
GTTTTATTGC CTTATCTGCT TNGTTAAAGC CTTCTTCAGA GCCGATTGCA ATTGAAGGGA TCTTCGGGGT TCTNCTCGGC
TNCAAAGGTC CTCGACAATG TTCCCCTTG

# <u>SEQ ID NO:1406:</u> (Length of Sequence = 392 Nucleotides)

GGACIGCCCG TITGITTATG AGACAGGGIC TCATTCTGIC ACTCAGGCIG GAGIGCAGIG TCATGATCAT GGCTCACTGC
AGCCTCGACC TCTCAGGCIC AAGIGATCCI TGCATCTCAA CCTCACGAGI AGCTACGACI ACAGGIATGC CCCACTATGC
CTGGATAATT GINCCITITT TTTTTTTGGI AGAAACAGGG TCTCATTCIG TTGCCCAGGC TAGTCTCAAA CTGCTGGACI
CAAGIGATCC TTCCAACTCG GCCTCCCAAA GIGCTGGGAT TACAGATGIG AGTCACAATG NCCAGCATGG ATTGTCCTTT
TCAGACCCAG ACCAAAGAAC AGGACTTATT TGTCCCAAGA CCAATCTAGG NAAAGTATAA GCTGTGTTGT CA

# SEQ ID NO:1407: (Length of Sequence = 362 Nucleotides)

GITAATIGGG NITCACAAGC AATAATITCT CCACAACAAA AACCACAACT TGAAGNGAGI TGAAAAGNGN TCAATAGIGG AAACAGICGC CICAGIACIT TINCITICIG GNITICATCT CIAGAAATIT NAAGIGIITIN AGNCAGAGIC CACCCTITGI GCAAGGCENG AACCNATGAA TOGACTCCTT GTGTGAATTA TTGCATCTTC TTCCAAAGCA GGTTCATCAA GACTTTCACA GAGATTCATT TITNTTGAGA AGTAAGGGTT AATAGGAGGA TAGAATTTGG TTCCNAATCT AGTGNTAAAA GTGTCCAAGC AAATCAAAAA GTAAGATATT TTAGGGGCCA TACCCACATC TT

SEO ID NO:1408: (Length of Sequence = 388 Nucleotides)

CCCCGCAGCA CCACGAGCTG ACCTCGCTCT TCGAGTGTCC GGTCTGCTTT GACTATGTCC TGCCTCCTAT TCTGCAGTGC
CAGGCCGGGC ACCTGGTGTG TAACCAATGC CGCCAGAAGT TGAGCTGCTG CCCGACGTGC AGGGGCGCCC TGACGCCCAG
CCTCACGAAC CTGGCTATGG AGAAGGTGGC CTCGGCAGTC CTGTTTCCCT GTAAGTATGC CACCACGGGC TGTTCCCTGA
CCCTGCACCA TACGGAGAAA CCAGAACATG AAGACATATG TNAATACCGT CCCTACTCCT GNCCATGTCC TGGTGCTTTC
CTGCAAGTGG CAGGGGTCCC TGGGAAGCTT TGATTGTCCC AINTNAATGG AACGGCCCAC AAAGAGCA

### SEO ID NO:1409: (Length of Sequence = 348 Nucleotides)

CAATGAACTC CITAAGCITT GITAATATGA GAATGICTIT ATCICTTCIT TATTICCAAA GGACAGCITT GCIGGITAAA ATATTCITGG TITAAGITTIG TITTIAGIAC TIAGCATATA TCATTCCACI CICTCCTGC CIGIAAAGCC TCIGCCGAAA GATCCACTIC TAGCCTTATT GAAACTCCCT TCIATGITAT TCGNTTCINC CICTTGCTGC TTCCAACATC CIGICTTGT CCATAATTIG TAACAGATTG AATATAATAT GAATTAGACC TCTTTAGACT GAATCTCATT GGACNCTTTT CACCCTTCTT GTTTTTGGGT ATTTAINICT TITCACAG

#### SEO ID NO:1410: (Length of Sequence = 370 Nucleotides)

GACTATTTAT TCTGCCTTAA ATCAATGGCA AATAAGTCAA GATGACATTI TGTGAATGTA GACTATGGAT ACACTCCTAA
TAGATTGATG TAGTCATAAA AGGGGGTCAA GTAGATGTTT TMCTGTTATG TAAGCAATAA TTTTCCCCGTG TCTTATTGAG
TATGGCTAGC GATTATTTAT TACATGCTAG ATGGGTTCTT TGCATGTGGG TTCCATATAG GTGCAGAAAT TTCCTCAGCC
ACTGGAGGGA TTTCGACCAT ATTTGTCATT TGGATGAGCT GTTATTAGAT TGAAATCTAC ACATCATTTC ATTAAAAATT
GTGCCCTAGA AAACGCAAAG CINTTGCACA ATGGCGATTA AAATTATGGG

# SEO ID NO:1411: (Length of Sequence = 385 Nucleotides)

GICTCAAACT CCTGACCTCA GGCGATCCAC CCACCTCAGC GTCCCAAAGT GCTGGGATTA TAGGCGTGAG CACCGCACCT
GGCCTATGAG TGGTCTTTA ATTAGGAAAT TTACATTITT ACATTAGTGA GATTGGTCTT TTGGGCTATT GTACTTTTT
TTTTTTTTTT TTGAGATGGA GTCTTGCTCT CTCACCCAGG CTGGAGTGCA GTAGTGCAAT CTTGGCCCAC TGCAACCTCT
GCCTCCTGGG CTCGAGTGAT TCTCTGCCTC AGCCTTCCAA GTAGCTGGGA CTACAGGCAT NTGCCACCGC ACCTGGGGTA
ATTTTNGTGG TTTTTAGTAG AGAATGGGGG TTTTGCTAAT GTTTGGCCAG GCTTGGGCTT GAAAT

#### SEO ID NO:1412: (Length of Sequence = 337 Nucleotides)

CCATTCAGAT TCCTCCTGGG CCTCCTGGCC CCATTTGCGA CAGATTTGCT ACCTGCTCCA GCTCAGCGAC CCTTCCCTCT
ATGATGAAGT GCATTGAAGA GAACAATGGT GTGGACAAGA GGATCAGCAG GTTTATTCTC CCCATCGGGG CCACCGTGAA
CATGGACGGA GCAGCCATCT TCCAGTGTGT GGCCGCGGTG TTCATTGCGC AACTCAACAA CGTAGAGCTC AACGCAGGAC
AGATTTTCAC CATTCTAGTG ACTGCCACAG CGTCCAGTGT TGGAGCAGCA GGCGTNCCAN CTNGAGGGGT CCTCANCATT
GCCATTATCC TGGGAGG

## <u>SEQ ID NO:1413:</u> (Length of Sequence = 367 Nucleotides)

ATAAGTEGAG TGAAGAAATT AATECATAGT TCAAGCCTAA ACAATACAAG CATCTCACGC TTTGGAGTCA ACACTGAAAA TGAAGATCAC CTGGCCAAGG AGCTGGAAGA CCTGAACAAA TGGGGTCTTA ACATCTTTAA TGTGGCTGGA TATTCTCACA ATAGACCCCT AACATGCATC ATGTATGCTA TATTCCAGGA AAGAGACCTC CTAAAGACAT TCAGAATCTC ATCTGACACA
TTTATAACCT ACATGATGAC TTTAGAAGGC CATTACCATT CTGACGTGGC ATATCACAAC AGCCTGCACG CTGCTNATGT
AGNCCAGTCG ACCCATGTTC TCCTTTCTAC ANCAGCATTA GACGGTG

## SEO ID NO:1414: (Length of Sequence = 360 Nucleotides)

GTATACAGCG TGGTCCAGCC ACCCGACAGC GAGATGGGCA TTITAAGAAA CGCTCTCGGC CAGATCTCCG AACCAGAGCC AGAAGAAGCATC TUTACAAAAA ACAGGAGTCA GAACAAGCAG GGGTTGCTAA GGATGCAAAA TCTGTGGCCT CAGATGTTCC CCTCTACAAG GATGGGGAGG CTAAGACTGA CCCAGCAGGG CTGAGCAGTC CCCATCTNCC AGGNACATCC TCTGCAGCAC CCGACCTGGA GGGTCCCGAA TTTCCAGTTG AGTCTNTGGC TTCTCGGATC CAGGCTNAGC CAGACAACTT GGGACGTGCC TCTGCATCTT CAGACAGAAT TNCTAGCCTG CCTNAGGAAA

### SEO ID NO:1415: (Length of Sequence = 314 Nucleotides)

CTCAAACACA GCATTIGAAG TCTTAATATT TTAGIACATA CTATACTATC TCINCTIACA ATIGITITIT GITAAAGAAA CCATGITITT NATICIAAAG AGITICCITT ACIGIGGATI TTACTGATIG CATCITIGIT GATGGGITAA GATTGICCIN ATIGICCCIA ATIGICCITA ATIGICCCIA TAGINCITIC AATGIGCIGT ATICAGIGCT GCCTCIGGGC TCCTAAACIG TGGAGGGCIG TTIGICCCIA TAGAATGG GGACAGATIG TCCTGCTTIT TAATTITCAA TGCCTGACIT TTACCCNCIA ACTITICCGT AGAT

#### SEQ ID NO:1416: (Length of Sequence = 370 Nucleotides)

TTCCATTTT GCTCCTTCTC AGGATAATAG CAGACCGGTG ATCACAACTT TAGTTTTGAT GAGATAACCT CCTTATC...

TAAAAATGGT CTCTATTATT TTCCAAGAGA AGACCAGTAA ACACTAAACA CCTGCCTTGA TCTCAGTGTC TTAGATGTTT

TCCTGTTTCT CCTTTATCCT AGCAAACTCC CCAGGTTGCT ATTCTTATTC CCATTTTATA GATGGGCAAC TGGGTAAGAG

AGGTAAGCTT GGTGAGGTCA CTGAGATAGT GGGGAAAGGA GCTTGGTTCA CATCAGGTAT GCATTCCCCC AAGGTTCCAC

TGGGGCATCT GAAGGAAGGG GTTTCTGGAA GTGCAAAATA TAGGGTACTG

#### SEQ ID NO:1417: (Length of Sequence = 365 Nucleotides)

GACTOCTICG CCAAGGAGC CATCAGCACC AGTIGITOCA GAGCAGCCAC AACACCAGIG ACCICCCITC TGCTTCCGGC CAATCCCGAC AGAGCCTCTT CCCGAGTCTT GAGCTCCTGG ATAGCTGCCT CAATAAAGCA GGACTCGGGA GIGIGCTTCT CCTCTGCCAG CACTACCAG TGCAGCACCT GCTCCTTAGA GGCCAGCAGC AACTTCGAGT ACTGGCTGT CTGTTCATCT CCTAGATGAA TGGGATGGTC TACATTCATC CATTTGGGAT TTTGGGCAAA AGCCACCAAC AACCCCTTTT TTTCCCTCTT CAATCAAGCT GCAAT

#### SEO ID NO:1418: (Length of Sequence = 354 Nucleotides)

CCAAATCCTT AAGITTACAA AGCIGITGGA AAACITIGIG TCCIGATITC AACAATCACG CTTIGITTGA AAGATGAGCC
AAGCTCACAG ACACTAAATT TTATGTCATG CCATAAGCTG GAGAGGAGCC ATTIGGCTAC AGCIGCGGAA CITCATTGAG
GAGCAAATGA AAGGCACATG GACGAGCACG CTGGTGCAGT TCATGTTCTT CCTGCCTGTG AATTGAATAC TGTCCTGGTA
GCAGTTTTGG GTCGGTCAGG AGCTCAAGGC TGGTTTGTGT GGCTGACTAC GGATGAGCAC TGAAGTTGCC TCAAAGAATT
AAGGGGTGTC CACANCAGCC TCTTGGGGTC TTTT

### SEO ID NO:1419: (Length of Sequence = 363 Nucleotides)

GIGGAAAACG IGGAAATGAT GIGGCCACIG AAAGAAATTC AAGACACIGC AGATTICCAT TITCAGCTCG
TGITTICITA IGAACAATAA CATIGCAGAA GGGGAAATAT CAGAAAGTIG ATIGATTITI AACCCAAAAA TAGAACTITI
TGITAAGCIAG GAAAGCATCI AAAATTAACA AGAATACAAA AATGCACITI IGITTACATT IGCTCTATIT AGATCITACA

337

AGAGATTATG TCTTGAATCT ATCCTGACTT CAGCAAAAGA CAAAAGAACG TTGAAAACAT CCTATTTCCA AATCGTTTAC AGGAAGTTAC CTAAGGAGNC TGACAGATTC AACGGCTGCT ACC

SEO ID NO:1420: (Length of Sequence = 326 Nucleotides)

GAAGATTITC TAGAAGCAAA TAGIGCCACC ATCCGTCATG AGGNICTGIT TCTATAACGC TIGINIGICI TINAGACTAC
GTAGGTGGTA GCTTATGAGT AGTAATGINC TITTIGITAGT AAATGTCACC AAATAAGCAA ATAAGAGAAA CATGAAGGCC
AAAAACTGIN TTACTATTCA GGAGAAAATG GACGGITTAG CAACAATACA ATGTAGACTT CAAAATATGA AAAATCAAGG
AAATTNCTGT CATTGTCTTT AAGGGCCTCC AGAGAAGTAT TAATTTGTCC TTTATGTGAA TTTAATGAGA TCATGTGAAA
TGTATG

SEO ID NO:1421: (Length of Sequence = 294 Nucleotides)

ACCCAGTACA GGTACTCTCA CAGGAGGCAC TCAGCAGGGA TGTAGTGACA GCAGGTAAGA NTCCACCTCT NTCCCTGCCT GCNCCTGGGA TCCAGTATTG GCCCATGTAT CINCCCATT TCCTCAGGCT TCCTGGACTT TINTTGGAGG GAAAGAGGAA CAGAAAGAGG AGCAGGCAGG AGAAGCAAGA GCTCCCGGGG GCTATGAAAG GTAACATACC TGGAGAGTTT NGGGAGACGG CGCCTTGTNA GAGACAAGGG GAAGAGACAG AAACAGGAGT ATTCTAAGAA GCAT

SEO ID NO:1422: (Length of Sequence = 306 Nucleotides)

GAAGGGCATA TITAATAGCT GCTGCAAACA TATGGAATAG TGCTTTAATC AGTGGTGAAC AAGAAATTGC CTGTTGTTGG
TTATAAAAAC AAGGGACATT AATGINCTTG TTCTTGTACC ATAGTAATGT GNAAAAAAAA ATAGTGGTTG NAATGGTGTT
TAATTTGTAC AGTTTGTGTC AAAGTAGAAT GGCNCAGATA TTTTGGTGGA TAGGCTTTTG TCTTAGTTAT AAAAATTAGG
NCATTTGGTA TGATAAAGGC NGAGAATCTT AACAATTGGG CACTGGCCCA GAAAATTNCA GGGTGC

SEO ID NO:1423: (Length of Sequence = 274 Nucleotides)

TGTGTGTGTG TGTGTGTGTG TGTGTGAGAA ATGGGGAAAG ACTGGTCTAG ATAATATTTC AGGTACCTTC CAACACTAAA ATGGTATGAT TCCCAGCTTA CAAAAAGCAA ACTATTTTAA TATTCACCAC TCAATATAGT GTATCAAGCT CTCCGTTTAT GTTTAAGGGC TTAGGGAACA GCAACAACTA TTCGTGGGCA ATTAATNCAA AAACTCATGT TACCAAAAAAG GCATGTTTAG GNCCTGCAGG ATAGTGAAAA AGCAAGAACA GTCT

SEO ID NO:1424: (Length of Sequence = 297 Nucleotides)

GEAGGATTAC TIGAGCCCAG AAAAAAAAAA AAGCCTCAGG GGTTTCGGTG AATGTTGTGT GGACTTCCGT GAGAACAGAC
GTTTGATGTG AACTGANTTC AAGGCTGATA CAGCCCAGAA CCAGGNACAA GGTGAGAAAC TGCTCGTTTC CGGGAGGCAG
GACTTCCTAA CCGGGAGGCA CTGCAGINCA CTTTCTGAAA CAGGTTTGGA GGATAGGGAA ATTCCTGNCA GCCCGGGGGG
ATCCACTTAG TITCTTAGNA GCGGCCGCCA CCGCGGTGGA AGGCTCCAGC TTTTGTT

SEQ ID NO: 1425: (Length of Sequence = 276 Nucleotides)

ATTITITICAA GEATGEAAAG GICAGAGAAA AATAAAATAA AACATCITIC AATAGICIIT CCIGGIAAAA GCAGCGICIC INTGGGCTGG GGAGTAAAGG GIGIGGGGCA AGGGGAGGGTG GAGAGGGCTG TAAACCITCC CCCAAACCCC AGIITITAGAT CCITTGGITT CCITCICCCA GAAGATGGIC AGAAGGGCAT NGIGGGNAAC AGCAGGGNGG AAAATATGGI GATGACAAAC CCCAGATGAT CAAGGGCTG ATGCTCCTGG GGCCCA

SEQ ID NO:1426: (Length of Sequence = 295 Nucleotides)

3215

TAGTOGCATA TOGACCOGAA AGOGITAATT TAAAGGGGGG GAACCTCAAA AGTITTITTA AAAAAGAAAC TIGTCIGCCA CAGTATGITA CCAGTGITAA CCCITCIGCC AGTAGCAAA CITITGCCTT AAGCCTITIT CCTCTAGGAT ACTCCCCATG TITCOGTAAT CITGGGCATA CATTITITAA GNATGGACCT CITTGCCTTG TITTGTTTTC ATGCTGCTGT ATGTCCAAGT ATTGTTAATT TCATAATAAG ACAAGAGTTG CITTCTTTTT TAATTCCTTT TTCCC

SEO ID NO:1427: (Length of Sequence = 207 Nucleotides)

TCAGGAATGA TAGTATCTGG GATGAACTCT TCTTTAATAA GATTCAGGCC AGINTTGGTG GGTGINTGCG GATGATTGTT ACTGGGCAG CCCCAGCATC ACCAACAGTT CTGGGAATTT CTCCGGGCAG CTCTAGGGTG CCAGGTTTAT GAAAGGTTAT GGCCCAAACTG AGTGCCACAG CTGGATGTAA CCTTNCACCA CTCCTGG

SEO ID NO:1428: (Length of Sequence = 223 Nucleotides)

TAACATTCTC TCCAACCTCC CCAGGTCCCA TCAGTGTTGA GAAGGAATCT AGGCCAGCTC CTGGGAGATG CCAGTTAAGC
CGCTTTGAAT CCTGTGCCTT TCCAATTGNC CCTTATAGCA GTCGATGTCA GGGATTGGGA CAACTTTCAA AACAAGTCCA
TCAAAGTCCC CATGGGCACT AGGGGCTCTG GGAACCCAGT GTCGAGAGGC TTAGACNCAT TGC

SEO ID NO:1429: (Length of Sequence = 222 Nucleotides)

AAAACCAAGG AGCAAAGGG AGACAGAGA AAAAGTGGGA TGGATTCAAA GACATTGCAA CATAGAACTN ACCGAACTGG CTTGINIGAG GTAAGGGNGG CAGGATGACT CACAGGITTC TGGGATTATG TGCAACAGGT GGAAGGTGAT GCCATTAGCC AGAATAAGGC TGTAGGCTNA AGGGGAGTNA AACTGGITCT GGGGGTATAA CATTGATAGG CC

SEO ID NO:1430: (Length of Sequence = 246 Nucleotides)

CAAAATTTCC TGTATCCTT CATGGTTIN CTTTTGTTTG TTTTGGTAAG AACATTTAAC ATGAGATGTA TCTTNAGIT GTTGTTGTGG TTGANCTTT TTAGATACAT AGTCTCACTC TGTTACCCAG GACTGGAGTG CCAGTGGACA TGATCCACAG CTC:\LTGACA GGCCTCAAAC TCCTGGGACC CAAATGAATC CCTCCCACCT NCAGCCCTCC CAAGTAGGCT AGGGACTACA GATGTG

SEO ID NO:1431: (Length of Sequence = 364 Nucleotides)

SEQ ID NO:1432: (Length of Sequence = 208 Nucleotides)

GIGAGINAAC AIGGAIGGAA ACAAAITATI AGGIIGINCA AAGIGAAAAA CACCAAAAAT AAGAITIAAA AAGAAIGICA GGIATCCATA GAAAAATATI AATAGGICTA ATACATATGI AAAANITGGC GICCCAGGGG GNAGAGACIG NAAAGITATA ITIINNATGG CIGAAATCCC CCCAANITTA ACATAAAGCA CAACATTI

SEO ID NO:1433: (Length of Sequence = 274 Nucleotides)

GGAAGGITTT TAATGCATGA AGTATACITG TGATCCIGGA GGITGGAAAA GATTCAGTAA AGATAAAGIT TGGCAAAAAT GATTCINICC CIAGGATTTG GGGATATGIA AATCAAACCA AAGGCACATT CIGCAGCTCA CAGCAACCIT CATTTITTGT

CCTAGATTGA GITATCIATC AAGAATCATT CATTCCCTCT CAGCCCTTGC AACTGTTTCC NATGACTTTG GACTTGGCCA TGCAACTTGC TTTGGCCAAT ACAATGTGAG TTAA

SEQ ID NO:1434: (Length of Sequence = 249 Nucleotides)

GCTCCATAGG TCTAAGTITG ANCITTICTA GAAAAGGATT TGCAGGACGA TCTGACGAAT CITGGGCTTC CAAATTAGTT
CCAACAGTTC TAGTATTITT TTTTTTTTT TTTTGACAGA AGCAAATAAG TAAGTITNAC TTTGTGATTA AAACAAAAGT
GAAATGCATT TAGTCCCAGG AAATGNCAAT CCTTTCTGCA TCTNACTTTT TTTTGCTGTG ACCTCGAGNT TCTCTTGTCC
TCTTCAGTT

SEQ ID NO:1435: (Length of Sequence = 201 Nucleotides)

GAATGGGGCC AATGGCACTC ACTGINICIT CAGGCCCCCA CGGACGGCAT GCCTGGGGAA GCCTAGTCTA CITACCATCA GCACGTTGAT CINICACACA GCATGGAGCC ATAGTTTACA AAGGACCACG GCAGGTCAAG GACAGGCCAC TAAAACTTTT GGTGCTGGGC ACATNACCCA CCCTCACCAN CATCAAAGAC A

SEQ ID NO:1436: (Length of Sequence = 312 Nucleotides)

SEO ID NO:1437: (Length of Sequence = 294 Nucleotides)

ATTCCAATGG TAATACTAAC GAATTGTGCT ATCTAAATAT TGGATAGTAA AAACGTCAAC ATTTAGAAAA TGTATATCAC ACAGGGAACC AATATTTTNC AAATTATCCA CATCTAATAT TAGGCAACCA CGCGCAANAA AAGACACGTT CAAAGTACAG GAGAAATGGA TGGATTTTAA TGTGAGATAG TACAAGANGT TTATTGATAT AGTTTCAAGA TTCCATATTG TAATAAACCT TTAANGAAAC TTTCACTTCT TGAGTTTTGG GTATAGGAAT CCAAAAAAAA AAAA

SEO ID NO:1438: (Length of Sequence = 311 Nucleotides)

GOCCCTTTGA CTTTGTGAAT GAGCACAATG AAATGCCGCC TACTGATGCT TCTNATGATC AGAACTCTTT TTTAATAAAA
TAAATAACAT AAATCGTTGA ACATAATGTT CCNGTTGAAT GCAAANCAAA AAAAATATGG NAAACATTTT GNTAAAATTT
TTTCCNGNTA AAACCATGAA CANTGGCTAT GATGAAGGTT ATTACATATG GAAAAAAAAC TCACACAAGC ATATTTGNAT
TTGGCTTGAA GGGAACCCAT CATTAAATGC AANGCTAGGG ATTCTTTTNG AAGCAGTTGA TCCTCAGGTT T

SEQ ID NO:1439: (Length of Sequence = 265 Nucleotides)

CETEACACAG TIGAAGGAGT CECTITAAAGA AGICCAGCTG GAGAGAGTC AATATGCTGA ACAAATAAAA GGAGAGAGGG CCCAGIGGCA GCAGAGGATG AGGAAAATNI CGCAGGAGGT TIGCACATTG AAGGAGGAGA AGAAGCATGA TACGCATCGG GTAGAGGAGC TIKGAGAGGAG CTINICCAGA CTCAAAAACC AGATGGCTNA GCCACTGCCC CCGGATGCCC CAGCAGINIC CTCTGAGGTG GAGCTINCAAG ACCIT

SEQ ID NO:1440: (Length of Sequence = 241 Nucleotides)

GITTTACTCT TGTGAAGATA GCACTTTAAT CCTAAATGAG CATGTAACGT GTGACAGATC CTATATCAGT TTTAATAATT GAAGCAGATA GTAATAACTA GATTATTGAC ATTTTTCNGT CATGTGTTCA GCTATTGCTT CAAACTTGCT CAAATTATAC

TIGGNATTIT ATAGIGITTI ATTIATTATA TACICINCIT GIAATAANNI GGIAATCIAG TITCCAGAAT CATGCAAATA

SEQ ID NO:1441: (Length of Sequence = 247 Nucleotides)

GACCCCGATA TTCCGGCATC ACATAGATAT CCTCCAGATA AANGGIGCGT CCCTTCCATG TACTGIAGAT GAAATAGTAT ATCCCATAGC CCACCACGCA GGGCCCCAGT AGCTTCCCCGG GCGCTGGAAG AATCTCTGCT ACCAAACAGT GATAGAAAGG ATTGINTCCA AAGCCATCTG CTCTCAGGGC TTCTTCACTG ATAGGATTT TTTTCAAGNA ATAATCCATG CTAAGAATGG GGTATTT

SEO ID NO:1442: (Length of Sequence = 233 Nucleotides)

GATTACAGCC AAGTTCATGA ATACAAATAA AATAGCAATT TCCCTCATTC TCTCTTTTGT TTTCTGNTCA GAGAAATCAG
GAGATGGGAG CATTATGCTC AGAAACCGAA GAGCTCTTCC AAGAGCTCCA GCTTAGAGTC CAGGCTTCCA GAGCATGCAG
CCTCCTAACA CGTATGTGGT CACATGTGCA AAGACCINTA TTACAAAATA TTCAGAGCAG NATTTCTNTT AGG

SEQ ID NO:1443: (Length of Sequence = 288 Nucleotides)

AATAAACAAT GTGCAGGTTT TTATAACTGA TCGGAAGAAG GTTGACCCNC AGTTATCACC TTTAAAAAAT GGTCTTAGTT
AGGCTTTCTC CCTTTGTCCT TTTCCAGAAG AAACTTGGAG TCTGTCAAAT TTCACAAAAT ACCCTGTTGA GATTTTCCTT
GGCTTTCATA AGGGTGAATT CACAGATTAA TTCGGAAAAG AATTTACGGC TTTCTAATCA AATTGTTCCT TCCAGGGGNT
TTTGTGNITA TTTAGGNCCT TCTAAAGGTT AACCCTAACT TTGATTAT

SEQ ID NO:1444: (Length of Sequence = 208 Nucleotides)

GGAACTGAGT CACAGGGCCA AAGCCCCCTT TNCCTCACGT GAAGCAACTC AGTAAGATGG CGGTGCAGTG AAGCCTATTC CCACACACCT CGGCACTGAT GGAGCAGTCT CCAAAGGAAG GCTGAAAGGA CAGCAGGTGG TTGCCTTNGG GTCCTTCCTT CCCATANCTT TAGAGTGCCA TTTTTCAGCA ATGGGTAATA GCATCAAC

SEO ID NO:1445: (Length of Sequence = 239 Nucleotides)

CCCCGGTCTC TNGGACACCA TITTCTGCCG CTGGACGCAA GGGTTTGTGT TTAGAGAATC AGAGGGATCT GCATTAGAAC
AGTTTGAAGG TGGCCCCTGT NCTGTTATTG CACCTGTNCA GGCATTTCTT TTGAAGAAGC TCCTGTTTTC TTCGGAGAAG
TCTTCTTNGC GGGATTTTTC AGAGGANGAG CAGAAGGNAC TCCTTTGTCA TACCTTGTGT GATATTTTAG AAAGTGCTT

SEO ID NO:1446: (Length of Sequence = 243 Nucleotides)

TECAGGGAAT TINITGATEC AAAACCAGGA AACAATTIAT CTCCACTGGG AATACTITGA AGAAGGGATT AGAGGGGGC
TAGGGCAGGG AGGATCINTA AAAAACAATA TITGCCAAAC TAAAAACACA TAGGCACACA TGGGNATTAT TITACTITCA
ACAAGITCTG AAAGTAGTAA CAAAACCAGG GAGAGTTAAA AGAATAATTT AACACTNA'GG NITCAGGAAT GCTAAAGGAG
ACC

SEO ID NO:1447: (Length of Sequence = 371 Nucleotides)

AGITATAAAT GAACATCTGI TGCCTACTTA ATAGGTCATT GAGTAGCTGT GACCCATTCT TAATTTGTAT GTAAGCATAT TTTTTTACATA TTTGTATCTA CTTCATTTTC CCTTGAAGCT TGCCCAAATTG GTACACTTCA GTTTGAACTG ATGTCTCTTA TATGCTGTAC CACCTTCTTA AAAATTGAAT TATCTTTCCT TCCACCTAGA TTGTTCTCAA AGCATTTGTT TTTGCTGGAC TTTCCACTCT TGACCATAAG ATGATAGCAT TCCCTAAGGA TATTGCAGCA CAGTCTAATT CCACTGGTTG TCATCTACAG TTAAAACCGCA AATAAAAAAT AATAATAAGC AGCAACTGAT TGCTCAAGTT G

SEQ ID NO:1448: (Length of Sequence = 366 Nucleotides)

AATTTTGIGT CCTGTAGGAA ATGCTTCCTT GGGTGTTTGT ATTATAGCCC AATCCAAGTC ATCCCTGAGA ACATCCCCAG
GTTGTAAGGA TTAGTCAGAA GTCATGATGA CTGTCCTATA TAAATATTTG GCCTATTAAC TAAAATTAGT ACCTTMCCAT
TTCTCCNCTT TCTTGGGCGG GGCAGCGGGG GAGTGCAGGG GAGGGGAAAT AGGGAACGIN CAATTGINIT TTAAGTAATG
CTCATAAAAT TCTTAGNCAA AGATGATCTT GCCCTCCACC TTGGTGACCC ACCGCATACG GGGTACATCT ATCTGGCCTG
TCTCTAGGCCC TAGACAGAAG GAACAGGGAG GGTTATTGTT AACTTT

SEQ ID NO:1449: (Length of Sequence = 234 Nucleotides)

GITGIGGGAG GGACCCGGTG GGAGGIAACT GAATCATAGG AGCAGITICC CCCATGCAGC TGICGAGATA GINAGITICT CATGAGAICT GCIGGITITA TAAGCITCTA GIGITICCCC TGCTGGCACT CATTCTCTC CCTGCCACCC TGTGAAGAGG TGCCTTCTGC CATGATTGTA AGTTTCCTGA GGCTINCCCA GCCATGCAAA ACTGTGAGTC AATTAAACCT CTTT

SEQ ID NO:1450: (Length of Sequence = 220 Nucleotides)

GCTTTINCTC TCCCTGTTT GTTTTGTAAC CTAAGGAAGC AGAGCCTCTG AGACCACAC CAGCAGCGTC GCCCGTCCCC AGAGGCACCC CGGCCAGGAC GGGCAGGAGA GGAGACCCCC GTTCCTGCAT GCNCTGTCGC CCCGCCACGG TGNTCTCCGC AGGGTGAAGC AGGAGGGTGG GTGGAGGCGC CACTGNTCCT CAGCTGGAAG GGCGGGGCAT

SEQ ID NO:1451: (Length of Sequence = 403 Nucleotides)

CCGCCTGITCA CCTACGGCCT GATTAAACTT GCCTTCCTGT CCTCCAAGAC CAGATGATGA TTATTCTCCA CCGTCTAAGA
GACCAAAGGC CAATGAGCTA CCGCAGCCAC CAGTCCCGGA ACCCGCCAAT GCTGGGAAGC GGAAAGTGAG GGAGTTCAAC
TTCGAGAAAAT GGAATGCTCG CATCACTGAT CTACGTAAAC AAGTTGAAGA ATTGTTTGAA AGGAAATATG CTCAAGCCAT
AAAAGCCAAA GGTCCGGTGA CGATCCCGTA CCCTCTTTC TAGTCTCATG TTGAAGATCT TTATGTAGAA GGACTTCCTG
AAGGAATTCC TTTTAGAAGG CCATCTACTT ACGGAATTCC TCGNCTGGAG AGGATATTAC TTGCAAAGGG AAAGGATTCC
TTT

SEQ ID NO:1452: (Length of Sequence = 353 Nucleotides)

TECCTAGAGA GGGGCCGGGA TITAGAGAGC TGTTCTTCTG CCTATCTGAT CGCCTCCTCA GACACTGATC TATTAGTCTA
GTGCTGCAAT TACTTGGATT GTAATGTTTC CTTGCAATTT TTGCTTTTCA AATTCTTTTC ACCCTAAACT GTAAATACGC
CAGGAGTAGG TAAAAACTTA CAGGIAAACA TTGCCAAGAN ATAAGGATTT TNATGTCTTC TGCTCAGTGG CATAACTCAA
ATCACATGAG ATAGATTTCT TTGCATCTGT CCATTGTATT TCTCTGAGGC TAATTTACAG CACTTTGTCA CGTTAGGNAT
TTTTTTTCCC CAGTGCTGCT ACTCTCCAAC TGG

SEQ ID NO:1453: (Length of Sequence = 258 Nucleotides)

GITGCCCCIN CIGICITICI GINACCCAGA GAAAGCITCA CAAGCATGCC TENAATINAG TIGCACCATI TIATIACAGC TGAAAGANIT GANIGIAAAG AAGGAAGIIT AATAGANCAT ATAAINCAGC AGATTIATIG ATGGGGAGGI ATCIATIGIA GITTGGCCAG TGAAGGCAGG TCATAGAGGA AAATTIAGGI AAGTCGGATT TNCTTTAAAA AGAGGCCCCAA GAGTTAGTAC CTCAGGATIT TGITTTCT

SEQ ID NO:1454: (Length of Sequence = 328 Nucleotides)

GAGATGGAGT CTTGCTCTGT CGCCCAGGCT GGGGTGCAGT GGCGCGATCT CTGCTCACTG CAAGCCCCGC CTCCCAGGTT CACGCCATTC TCCTGCCTCA GCCTCCCGAG TAGCTGGGAC TACAGGCGCC TGGCACCACG NCCAGCTAAT TTTTTGTATT

TTTGGTGGAG ACGGGTTTC ACCGTGTTAG CCAGGATGGT CTCGATCTCC CGACCTCATG ACCTGCCCGC CTCGGNCTCC CAAATTGCTG GGATTACAGG CGTNACAACC GCGCCCGGCC GGTAGCAATA GTTTTAATTA AGGTCTTAAA ATCATACAAA AAGGAATT

## SEO ID NO:1455: (Length of Sequence = 342 Nucleotides)

AATTTAGGTA GATTAGCATT CCCATGTAAC TTACCAGAAT CAGAATGAGA ATTCAGAAGT CACCTGANIT GGCCGGGCAT
GGTGGCTCAC ACCTGTAATC CCAGCACCTT GGGAGGCCAA GGCAGGCAGA TCATCTGAGG TCAGGAGTTC GAGACCAGCC
TGGCCCAACAT AGTGAAATCC CGCCCCTACT AAAAATACAA AAAATTAGCC AGGCACCCTG TCCACAGCCC CCACACAGAC
TCGAGGGGCC CCCATCTCCT GTTCTGAACC CAACAGGGTG GTCCCACTNT GGGACCACAA ACCAGGTATG ACTGTTTNAG
AAGCAGGCTC ACTACCAGGN TA

### SEO ID NO:1456: (Length of Sequence = 296 Nucleotides)

ATCTTTGACC TATTAGGTGA ACAAATGAAC CTCACAGGAC ACACAGTATT TITTAAAGGC AGACTCGCTC TCTTTTTTGC
CAGTNAGCAG TTCTAGCTAA CCAAGTTACA CACTGTGGGT ATTCCTGCCT GCCTCTTGAA TACAAAGGCC TAGTTCAAGT
GTTGCTTTTT TNATTTCAAA TCAATTTTTT CTTCTTTCCT TTTTGAGATA AAACTATTAA AAGTACTACT ATTATATATAA
AANCTCAAAT CAACTTTTCG GCCTCCTCCT CGTGTACCAG GGAGTATATT CTGACG

#### SEO ID NO:1457: (Length of Sequence = 314 Nucleotides)

GAGGATTCAT AAGTAGAATT TATAAAGAAC TCCAAAGAAT CAATAACAAA AAGACTGGCT ATGGCCTTCG NAGAGCAGCT
GCTGTCCTGG AAATCAGAGG ACAGTGAAGG GAAGTCCGAA GATGAGCCTG ACACCATTCC GACATCCGTC CTCCTGCAGG
TGGTGGAGCT GCTAGGAAAC TTCTTNTGGA CCACGGACAT GGCAGCCTGC NTGAAGGAGC TTGTTTTCCA TCTCCTGGCA
GAGCTCCTAC GCACGGTGCA CACCCTGGAG CAGAGGCGGC ACCCCGCTGG CCTGTNCTCC TCANTCGCCC TCCA

### SEO ID NO:1458: (Length of Sequence = 254 Nucleotides)

GITCCAGTCA CAGATGITTC ATTATCACTA TICAATATTA TIAAGCATCI AATAAGTATA AGGATGCATG AGICAAGGGT CCCTACCITC AGGTCGGAAG CAGGAAAGAG ACCAGATCCT AGAACAATAG GACATGGTAC CCGCTGCCTA GACGGAATTT AGAATCCGGC TGGGGTGAAG AGATTAATGA GCGAGTCATG CCATCAATGT GCTGTAACTG AGGTCCTAAA AACCACCCAG CCGCGACACA AACT

## SEO ID NO:1459: (Length of Sequence = 343 Nucleotides)

## SEQ ID NO:1460: (Length of Sequence = 348 Nucleotides)

ATTGTCAACA GIGITTITAT TTATACCTAC AAAAAGAAAA CAAGATGATG GTATCAAAAG GACAATTTAC AAACTAAGAA
TAGTAACATA GCTTTCAGCA TCCTGTGCCT GANCATCACA CATCTACAAG TCTTTCAAGT CTTAATGCAA CAGGAATGIN
TCTGGAGACC NGCAAGAACA TCAATAGAGA GCACTGATCC CAAGCAAAAG CCACTAACCT TTTAGATGAG AAGTCCNCAC
AACGNATTGT TAGGGAGGAT TTGGGAGAAG CAGCCCCTTT GCTTAATACA TTNGGACCCC TTTCCCCTAA GTTGAGGTTC
AACCCTTGAA TGCAATAACT TGGCATAA

٠,

SEO ID NO:1461: (Length of Sequence = 343 Nucleotides)

TOGGAAGATC AGGICTIACI TGITTITCIG TCCCCTCCAG CGCTAGATCA ACACAGIGIT AAATTAGIIG AATTICAGIG
GAGGAGATAA GACAGAAATG AAATCIGIGA AGATICAGAC TTICCCAAGI TAAAACCAGI CITGAGITAC AGATCAAGAT
GATGCCAGAA ATAACATCAC ACTGAAACAT CAGTCAAATG TAGTCATCAT GGCAAAGGCC AAATGICCCT TICTITTITT
GCCTCCGCCT GCCTGGGAAT TTAGCATCCC CTAAAGCCAC TCATCTGGGA CAGGATTITA GGGTGTGTAC ATGTTTTTCA
ATCTCCACAG GACCCAGCTG TGT

SEQ ID NO:1462: (Length of Sequence = 335 Nucleotides)

GECATEGACC AGCCAATGAC TTGTTCATAG TCGCTGCAGT TATGAGCACC AGCTTGAACT TAGGAACTCT TATAAATTTC
TGTTTTCAAC CAAGTATTGA GTGTCGCTA TGTGTCAGAC ACTGCGCTAG GTGCTGAAAT CTCACTTCTA CTGAGGAAGA
CAGGAACATA AATGGTGATG ATCATTGCAT TAGAAGTGAT GCCACGGGAA TAGTGTGGGG CCTCTCCAGG GGGATCTNAA
GGTAGGGAGA CCACACTTCT CCAGTGGTGG AGAGGGCAGA CAGCGTGTAT NGGGTCCTCA AGGTCTNATT GCAAAGGTCA
TGTTTTAGCT GTTCA

SEQ ID NO:1463: (Length of Sequence = 382 Nucleotides)

GGACCGCTTT CGGTTCCTCA GGATAAACAC GAGCATGCCC ACCACGGTGA AGGCGGAGGT GACAAACACC AGCAGCAGTC
CCGGGACCAA CACCGAGATG GACACCCTGC TGGTGTCTAG GTAGGAGTTG GAGTGCGTCC CGGTCTCCGC CAACCCAGTG
CTGTTTTTAC TGTGCGAAGT TAACGTGGGC GAGATCCTAG CGTACAGCTG AGGGCAGATC TCGTCATTGG AGAGGAGCAT
GAAATCCTTT CTAAAGAAGT TCACCGGCGT CTCACACTTN AGGTCGCTCA TCAGCACTTC GGAACCCAAG CNTTCTGNCC
ACTTGCTTGA AAGGCACAAT TGTNCAGGAG CACTNCCAGG GGTTTCCGTG GAGGGTCTAT CT

SEQ ID NO:1464: (Length of Sequence = 187 Nucleotides)

AANGACCTCA TTTCAAAGAA GAGCCGTCTC CTGACAAGGG ACGTTTCCCA GAGAGGAGAC GTGTTAGTGC AACAAAGACC AGGCCCTGGN AGCCACGAAA GCCCTCCAGA TGCCTTGAGG ACGCCGTCTN TAGCCGNGTG GGCCACCNCC GGGTGGGGAC AGACAATGAC AAGAGGCAAG ACAGCCG

SEQ ID NO:1465: (Length of Sequence = 276 Nucleotides)

TTIACACAAT CAGTATAATA CIGATAGGAA AACTIGACTG AGTICAGAAA ANGAAAACGA AGTAGAGATC TCACTIGCAT CAGAACAAAA TGICAATCIA TTAGCAGATA ATATICATCA GTATTITTIG AAAATACAAT ACCACANGAA AGAAACAGTG GACATTIGGA GGGCTTIGAG GCCTGTGGTG GAAAAGGAAT TATCINCCCG TAAAANCTAG ATAGAAGCAT TCTCAGANAC TTGTTTGTNA TGTGTGCCCT CTACTGACAG AGTIGA

<u>SEQ ID NO:1466:</u> (Length of Sequence = 375 Nucleotides)

GGGGTTINAC CATGTINCCC AGGCTGGGCT CAAGTGATCC ACCCTCCTTG GCTTCTCAAA GTGCTGGGAC TACAGGTGTG
AGCCACTGTG CCTGGCTGGT TITINITITIT TNAATGAACA TGTTGCAAAT CACGCAGAGC ACCININATT CTGCATTINC
TGGGTTATAA CAAACATTGT CATCTCTGCC TACATTTAAA AGGCTCTGGT GTTATTTTAA TATGTCTTTT CAATTTAGTA
ATTAATTCTA ATTTTCCTTT GAGCTGAGAT GTTATTCATT GTTCTCCTAG AGTTGCTTTT ATTTGTTCAT ATTAGTTTCC
CTTAGCATGT TTTTCGTATC TCTTAGTTAT TAGATACCTG AACATTTGAC ATTGG

SEQ ID NO:1467: (Length of Sequence = 319 Nucleotides)

TGATAAAAGG AAAACGITIT GATTIATAGT ACCAAGIGCT TAAACACAAG GATAGIGITA GATTITCGAG TGACTITCCT
TTTTGCATT TTTGGCAGTA AAAGCCAAAC GITGIATITG TCCTTTTCAG AGITGICCAG CCCTTTTTTC CTTTGTCCAA
AATGATTCTA AATAGAATCT AATAAACCAA TGIAGCATTA TITTTTTCTA AATGAAGCCC CAAAAAAGAA AAGIGCCTTG
CATCATITAA AAAAAATAAT TAAATCCTCA TGGCCTCTAA ATTAGGIATG TAGGGCACTG AAAAGITCTT AACATTTTT

# SEO ID NO:1468: (Length of Sequence = 352 Nucleotides)

TTTGGTTAAC ATTCCAAACA TGTATAACCA ATTAACATGG CCTAGGGTT TCTTTTTATT GGTATTCACT TCAGTAACTT GAAACCACAG ATATAAGCAG TATATAACCA GAAAGTTACA AGTAAACACA AATTATACAT GCAAATTTCT GTTCACAAAG GTCACATGTG CAGGTACATG ANTTAGAAGC GTGCATCTAG GATTATGGCC AAACTGTTTT AAAAATGCAG AAATGTAAAA TTACATCTTG AAAATATGAA GAGATGGTCT ACACACTTCA AAAATCAAAT GTTGCTTATA CCAGAGATGT ATGTCAATCA CGGGNTTCAA GTGACAAGCA GTAAGGATCC TC

## SEO ID NO:1469: (Length of Sequence = 427 Nucleotides)

GAGATGAGT CTTGCTCTGT NACCCAGGCT AGAGTGCAGT GGCGAGATCT CGGCTTACTG CAACCTCCGC CTCCTGGGTT
CAAGTGATTC CCCTGCCTCA GCCTCCCAAG TAGCTGGGAT TACAGGCGCC TGNCACCGCA CCCAGCTAAT TTTTGTATTT
TNAGTAGAGA CGGGGCTTTA TCATCTTGGC CAGGCTGGCC TCCAACTCCT GACCATGTGA TTCACCTGCC TCCACCTCCC
AAAGTGCTGG AATTACAGGT GTGAGTCACC ACACCCGGCC GGATTCTGTT AGTTTTCTTT AATGCATATT GAGTTTCTTT
AGTTTTAACA CACCTTAT CTTGGTTGGA CCCAAACTAT TCACTATGTT TCTTGGGGGA NAGCTTNGAA TCTTGGGGTG
GNAGCCAATT AGTAATAGC CAGGGTG

# SEQ ID NO:1470: (Length of Sequence = 426 Nucleotides)

AGGAGITTGA G-CCATCCIG GGCAACANAG GAAAACCCCG TCTCTACAAA AAGAAAATTT GGTTTINATA TITATTTGTA
TTÄAATTTT TAGAAACATA GCTGGGCATG GTGGCACACG CCTGTAGTCC TAGCTACTCA GGGGGCTGAG GTGGGAGGAT
TGCTTGAGCC CAGGAAGTTG AGGCTGCATT AAGTGTTGAT CACACCACTG TNCTGCAGCC TGGGTGACAG AGTGAGACCC
TGCGACTCCA GACAGGTGCA CACCACCACA CTCAGCTAAT TTTTTGTAGA AATGAGGTCT CACTATGTTG CCCAGGTTGG
TCTTGAACTC CCGGGCTCAA GTGATCCACC TGTCTCAGCC TCTCAAAGTG CTGGGATTAC AGGCATGAGT CACAGTGCCT
GGGCCCAAAT TCATAGTCCT AAACAT

## SEO ID NO:1471: (Length of Sequence = 372 Nucleotides)

AGAATATTAA AAAAGACCAG ACGCTTAAAG CAAGANITGA AATACCTAGT TGTAAAGATG TGGCACCTGT GGAGAAGACT ATTAAGTTGC TTCCCAGTAG CCATGTTGCA AGACTACAAA TATTCAGTGT AGAAGGACAA AAGGCAATTC AGATCAAACA TCAGGATGAG GTTAATTGGA TAGCGGGTGA TATTATGCAT AANCITATTT TTCAAATGTA TGATGAAGGA GAAAGAGAAA TCAATATAAC ATCAGCTTTA GCAGAAAAAA TTAAAGTTAA TTGGACTCCT NAGGTTAACA AAGAACACTT GCTACAGGGT CTGCTTCCTG ATGTGCAAGT ACCNACATCT GTAAAAGATA TNCGCTATTT CC

## SEQ ID NO:1472: (Length of Sequence = 332 Nucleotides)

GGTAGAGACA GGGTCTCACC CTGTTGCTCA GGCTGGTCTC AAACTCCTGG GCTCAAGCNA TCCTTTCACC TTGGCCTTCC
AAAGTNCTAG AACTGGCCAG GGGTGGTGGC TCATGCCTGT AATCCCAGCA CTTTMGGAGG CAGAGGCGGG CAGGGAGTTT
AAGACCAGCC TGGCCAACAC GGTGAACCCA CTCTCCACCA AAANTACAAA ATTTAGCTGG ATGTGGTGGT GGGCGCCTCT
AATCCCAGCC ACTCAGGAGG CTGAGGCAGG AGANTCACTT GANCCCGGGA GGCGGAGGTT GCAATGAGCA GAGACGGCCT
GGACGACAGA GT

SEQ ID NO:1473: (Length of Sequence = 434 Nucleotides)

GCCTTTAATT TGGTTTINCT ATGCCAGTAC AGAAACATCT GGACAACACT CTTGAGCCTG CAGAGGCTCA CGGCCACACC CACTTCTGCC GCAGGACTGT CTGTTGAGGA GCCGAACCGA TGAGGCACAG TAGCCAGGCC CTCCCGAGGG CTCCAGAAGC TCTAGGTTTA CGGGGTCACC TTCTTGTAGG TGACGTGAGG ATGCTGAGTC ATTGCCTGTN TCGTGGTTGC CATGGAGGACC GTCTGGCTCAA GTTTGCCTTC AGAATTCAGC CTGAACTTCC GGGTGATCTG CTCTACGTGG GGCTCCTTGG CGAAGGAGAT CCTGGGGATG GAGTGGGATG CGATGCACAG NTCCTGCCCG TTCAACTCGC CCTCCTNCAC TTTCCANCAC GGCTGTTTTC TTGGGGTGAC AAAAGGCCCAC CTTTTTGGTG TCGG

SEO ID NO:1474: (Length of Sequence = 402 Nucleotides)

SEO ID NO:1475: (Length of Sequence = 324 Nucleotides)

TIGCATACCT GIGCTGTGTC AGACCAGGCA GAGICATCTC ATTCCACTGG TCTAATGGAT GGCAATTGAA TITAATTAAC
AAAACTCCTT TGACTTAGTT TCATACTGTG CTGAATGTAA TGGAATCTC TCTGCCCCCC TTATCTCTCT CTCTTTCACT
CTCTCTCAAC TAAAAATTGT CCTTAACTAA CATCCACTTT AAGAATATTA AAGGCTATAC ATTATACTTA AAAGATACAA
TACAGTCATC CCCCTTTCCA TGACTTAAAT TGTATAACAT AAAATAATTA AAAAGNTACT TTGGATAGTG ATACACAGTA
TAGG

SEO ID NO:1476: (Length of Sequence = 244 Nucleotides)

GAAAAACCAG AAACTCAAAA TCAGAGTGCC TCTCCTCCTC CAAAGGAACA CAGCTCCTCA CCAGCAACGG NACAAAGCTG
GACAGAGAT GACTITGACA AATTGAGAGA GGAAGGCTTC AGAAGATCAA ACTACTCTGA GCTAAAGGAG GAAGTTCGAA
CCNATGGCAA AGAAGTTAAA AACTTTGAAA AAAAATTNGA CGGATNGATA ACTAGNATAA CCGATGCAGA GAAGTCCTTA
AAGG

SEQ ID NO:1477: (Length of Sequence = 338 Nucleotides)

ACAACACATA CITGAAACIG ATTATGACIG INTITGAATG CATTITGATT CCTTAGCIAT GCCTCTCAGG TGAAAGGACC AATGGCAAGA GGAAGCAGAG GATTCATGCA CIAGAAAATA CTGAGAGAGA TCAGAGTATT CTGTCTACTT CACIGAAGAT ATGGTCTATT GAGGGAAAAC TAATTAACAG TIGATCCAAG GAACAAAAGA ATGCTGTTAT GTGACATTIT GTTGGGAAAC TGACTGTAAT AATAATAAAA CAAATGTCCA GAGGAATGTG TCACATAATT NCAGTGTTTA TGGTTGATAA TTCAAAGGCA TAGATGAATT GGGATTCT

<u>SEQ ID NO:1478:</u> (Length of Sequence = 397 Nucleotides)

ACCCTITCCC ATTCTGATAA TCTGGCCATG ACTAGCAGAA GCACAGCTAG GCCCAATGGG CAACCCCAGG CCAGCAAAAT
TTGCCAGTTC AAATTGGTCC TGCTGGGAGA ATCTGCAGTG GGAAAGTCAA GCCTGGTATT ACGTTTTGTC AAAGGGCAGT
TCCATGAGTA CCAGGAGAGC ACCATTGGAG CGGCCTTCCT CACCCAGTCC GTTTGINTAG ATGACACAAC AGTGAAGTTT
GAGATCTGGG ACACAGCTGG GCAGGAGCGA TATCACAGCT TAGCCCCCCAT GGTACTACAG GGGTGCCCCAA GCINCAATCG

TOGGTTTACG ACATTACTAA TCAGGGAAAC CTTTTGCCCG AGCAAAGACA TGGGGTGAAG GGACTACAGC GACAGGC

### SEO ID NO:1479: (Length of Sequence = 389 Nucleotides)

GCTAGACNGC CGCCTTGCGG GGTTGAGTGG CCCGAGCTAA GGGTGCGGAG ACCCAAGGGC GGCGACTACG ACGCGTTGA
TATCGGTGGT AACGACGGCC TCAGCAGGCG GGGAAGATGA AAGGCCGGNT CGAGCTGGGA GATGTGACAC CACACAATAT
TAANCAGTTG AAAAGATTGA MTCAGGTCAT CTTTCCAGTC AGCTACAATG ACAAGTTCTA CAAGGATGIN CTGGAGGTTG
GCGAGCTAGC AAAACTTGCC TATTTCAATG ATATTNCTGT AGGTGCAGTA TGCTGTAGGG TGGATCATTC ACAGAATCAG
AAGAGACTTT ACATCATGGA CACTAGGGAT GTNTGGGCAC CTTACCGAAG CTAGGAATAG GGACTAAAT

#### SEO ID NO:1480: (Length of Sequence = 384 Nucleotides)

CTEAGAGCCA GGAGCTCTTG CGGAGAAGCC ACTGTCTGCA CGCCACCTGC TTCGATGACC CTGCTCTGCC ATCCCTGTGC
TCCAAGGGCC GGGCCCTGCC GTTGCCTGTG CCAGACGGGT CTCAGGGAGA TGCCGGCCAG CAGGTATGCA TGGGGAGGCC
TGGGCATCAA GGCCCGGATT CTATGGCTGC CAGTTTCATT CTCTCGTTGT TTGTCCCCCT AGCAAGACTT ATGAGGTTCC
TTGAGGACAA GACTCCCTCC TGCCACCTGG TCTGTTTCCT GAACATTCAC TGCACTAGCA CGGNCCCGGG ACGCAGNCCT
TGGGAATCAG GCCGTCGGCC ATGGTAGAGC GGCNGCCACT GCTCGGCACC GTGACGGACG TTTG

#### SEO ID NO:1481: (Length of Sequence = 257 Nucleotides)

ATGICIAGAG CIATTCIGIT TICCCAAGCC ATTIGGCTAG TAGGCCCTAA TIGGICAGIG GGITCIGACC CCCCAATCCC TACCICAGCA GCAGGAAAGG GAAGIGCIGG TCTCCACCIG TACCACTAA GGCCCCGIGG TATCCIGGCA GAAGCCICTG CATGIATCIN CGCTCTGAGG ATGGGGGITT NAAAACAAAA TAAGACCCTA CGTCCTACTA CCTTGAGCIT GGCTCTAAAA CCACGGGAAA GGAAGAG

### SEO ID NO:1482: (Length of Sequence = 345 Nucleotides)

AATTGAGCTC AGACTAAAGG AATTCTTTTT TGACTAAATA GTGATTAAGT TATGATATTC CTGTTGGCCT AAGAACAATG
CCTATGATTT AGTTGTGTTA TGTATATTTG TACTTATAAC CAAACAATCG ATTGGGTACA AGTAGCCTTA GGGCAATACT
TCCTTAAAAAA CATGTTTCTG ATAAACTAAAA GCTTTAGCAT TAACCAGAAG TCATAATTTA ATAGTATTGT AAAAATACCT
CATTTATTTT AAATCCTGTG TTGGGGTAGA GGATTACAGT TGTCATTTCA AATACATGAA TCTCTTGTCA AAAGRGGTAC
TTTGACAGTT TCATGGGAGG TCAGG

#### SEO ID NO:1483: (Length of Sequence = 344 Nucleotides)

CTGATGTACT GTTTTAATAT GCTGAGTACT GTTGATTCAA CAACAAACCT TAATGGGTGA TGAGCTTTTG CATACCAATA
TGAATTINTC AGCACTTCTG AAAACTGGCC ATCATTTTNC AAATTCACAA TTTGCTGGAT GTCAGGGAAC AATAGGAAGA
AGAATGAGCG TCAATTTTCA TGTCTTCCTT TGCTTCTTCA CTGGCCTTCC ATAGAAGTAG TCAGAAAAAAA ACAAAGCACC
ATCAACCACA CTTCACAAAC AATTCATGTT GGCCTAAGCT TTGCTCAACA TTCATATGAC AGAAGGTAGN ATAATGAAAA
GGGACTGCTG GGCATCACTT TCCC

#### SEQ ID NO:1484: (Length of Sequence = 380 Nucleotides)

TTCCTAAAAG CAGTCTITCC TACAACTIGI ATGCAGTAAG TCACTTAAGC ACTTAAGTGI CATATGGGTA CITACATGGA
ATTAGAGCAC TTCCTGAATG GAATTAGAAA AAGGCAAATT GIGCATACTA CIGATGCATT CATTTCCTAC AGAGATATGA
TACCAAGGGC CAATAAGTGA ATAGAAAAAAG GGAGGAGGAT TTATTAATGG AATGAGTTCT AACCCTGTCT CITACCAGCC
ATATGACTTT GGGNTAAATA ATCAAACGCC CAATGAGCTC AACTGTCTAT TATTAGGGGA ATTTAAATGA GAGAATGCAC
ATTAATTATG CATTGCAGAG TACATGGGAA AATAGTAAAA GCTTAATATT TAATACGGTC

SEQ ID NO:1485: (Length of Sequence = 334 Nucleotides)

GAAGGAGCGG GGAACCAGIT TCTCACTCTC CTCCCACTTG CTATTGTCAG AAGAGCGAGA TTTCAGGGCA GCAGAGAGCA
TCAGGAGATC AAAAGAAGAC ACTGCTGGGT GGTCCCTTAG CAAGTTTTAG CTTCTTTNCC TGCTGGGAGA GTATTCCTTG
GGCACAGTGC CAAGTGTCTC TAAGAAAACTA GTCATGCCTG ANCTTAAGGG CTCGCGGATT CTGGGTGGTG GATTTCCTTA
GGCTTGTCTG AGCCTGCCAG TGCTCTCCTC TGTCGCTCTG ATTTCCATTC ACGCTGAGCA GTCTGCACTN CCTTGGACAG
ACCCACTGGC ATTT

SEO ID NO:1486: (Length of Sequence = 164 Nucleotides)

CTGAAACGGA AAGATGGCGC TGCTGINCTT CTAAGCCTAG GCTTCTTGCA CTAAAGCACC AAGGGCATCG CACACAGGCT TGGCAGAGGG GCCATGGCCA GANTCACCAC CTTCAGACAA GTATGTTGGA GGTCTCGAAT CCCTTGGCAC CCCCAAGCAT GCAG

SEO ID NO:1487: (Length of Sequence = 298 Nucleotides)

TTGAACCCAG GGGGCAGAGA TTGCAGTGAG CCGAGATCGT NCTGCTGTAC TCCAGCCTGG GCAACAGAGC GAGACTCCAT
TTCAAAAACG AGAACCCAGA GGGCTCACTT GCCCCTTCCA CCACACAGTG AGAAGGCACC ATCTATGAGC CAGGAAGCGG
GCCCTCACCT AACAGGATCT NCTGGGCCTT GACCCAGGNC TTTACAACTT CTAGANCCAT GAAAAAATTTC TGTTGTTCCT
AGCAGNCCAA ACAGAATTAG AACCATTAAT TTCTATTTCT CCTTTAGCTT AACACTGG

SEO ID NO:1488: (Length of Sequence = 343 Nucleotides)

TIGCTAGITC AGGMICAATG TCATGGCTGT AACTAATATA GTACATTCGG CAGTTGCAAC GCGAAATGAT CCGCTGGACT
TGCTGGGCTT GCTGTGCCTC AMCTGGCTGG TTCCAATCTG TGGTTGTGGT AACCATGCCG CCCACTGCCT GCCCACTCTC
CATCAGCTCC TGCACAGAGT CCAGACTACG CTGCCGGTGC TCGCTCTTTT GCCCAGGTTG AAGTGCAGTG GCGCAATCTC
AGCTCACTGC AACCTCCGCC TMCCGGGTTC AAGCAATTMT CCCCACCTCA GCCTTMCGAG TAGCTGGGAT GACAGGCGGC
CGCCACAACG GCCAACTAAT TTT

SEQ ID NO:1489: (Length of Sequence = 412 Nucleotides)

ATTACCTTIT TATAACCCAA GANTGCCATT ATTACACCCG GAACCCTCAC CAAATAAGTA GGAAAACTAC ACTGAGAACA
ATTCGGCCCA GCTGTCTCIG GCCCATTTCC CTTTCTACCG CCTCTTGTGC ATTCCAGCAA TCTAACTCGA TGAATGATCT
TCCAGTTGGA AAGATGGGGA CTTCACAATG TGCAGACCCA AAGATCTGTC TTCCAAAGGC CAATCACCAC TGTATCCTTC
GTTCCTTTAA ATGTCGTTGT TTATTTGAAT ATATTAAGGA ATAATATCAA GGGTAATTAT CTATGTATAA AATGTATCAT
TAATTTTTTA GGGGACCATC ATACTGTTTT TCCACAGTGG CTGTACATTT TACAATTCCC ACCAACAATG CACAGGGTTC
CATGGTTCCT AT

SEQ ID NO:1490: (Length of Sequence = 356 Nucleotides)

ATACCITCIT TCATTIAAGC CACCCAGTCT ATGGIACTIC GITATGGCAG CCTTAGCAAA CTAATACGGA TTCCTCATCA
GGITCAGATT TINCTAAATA AAATGIGITT GIGAGGGTGG TACAAGCAAC AGTGATATAT TTCTTTAAGT ATTTCCCCC
AGCCAAATTC CAACAAGACA ATAATGICTA ATGCACTGTC TGGIGAATCG GAAAATCTCC TGAATGAAAT AAGAGCCTCT
AATACCCAAA AGGGAATGAA GIGAGTCATC ACCACAGCCT GIGAATGAAA ATAACTGCTC TGAGGAAAAC ACATGIAAAA
AATGACACCA TGIGGATTAA ATGGGGGAAC ACAAGT

SEQ ID NO:1491: (Length of Sequence = 335 Nucleotides)

TTCACTACCA AAACCAGTTA CAACAGTTCC AGCCAAATAA CACAGGCTAC CCCATATGCC ACGACACAGA TCTTGCATTC CAACAGCATA CATGANTTGG CTGTCGGTCT GCCTGATCCN CAATGGAAAA GCTCAATTCA GCAAAAAACA GATCTGNTGG GATTTGGTTA TTCTCTACCT GATCAGAACA AAGGTAACAN TGCCTTACTT TACATTCCTG ACTACCGNTT GGCTGAGGGA TTGTNTAATA GAATGCCACA NAACCAGTCT NAGGATTTTA GCANCCACCA GCTCTNACAA CAGCTCAGGA AGGAGTTGGC AGINTCTCAG GTGGG

SEQ ID NO:1492: (Length of Sequence = 321 Nucleotides)

GACTICATAA AACATCCITT ACTATATTIT NAAAGAAAGC AGAAGTAACA GCAATATATG TAAAAGTAAT GNITTAATGN CIATAAGCAA GNCAAAGCAA TAGAATTGIG CITCITTIGC AGACTGGGGN CAATGAAATG TITAGCTACA ATTINCCCAT ACAAACATGA AACAATATIC ATATAGNNIA ANCACCCTCA CAAATAACTG ATGGGTGATG ANCACACACC AAGTICGACC AAAGCAAAAA NIAAACTGAA AATTGITGGG TGGGGTTATT CATATTITAA ATTCAACATG CITGCTCTAT TTAAAAATAC C

SEQ ID NO:1493: (Length of Sequence = 315 Nucleotides)

GACGGAGGA GGGGACAGAG CCCAGGGATG GAGGGGGGAT GCGGGGGACA GAGCCCAGGG ATGGAGGGGG GATGCGGGGG AGCAGCTGGT AATGTGCAGA GACTGGGAGA GGGCGGTGTC CAGGTGGAGA GTATTTCAAG GAAGAGAAGG ATTAACAGCG TCCACTGCCG CAGATGGGCC AANCNGAGAT GGGACTGGAA ACCAACCACT GCATTTAGCA TCCTGGGGNC TGCTNATAAC CTTGGTTTGA TGGCTCCTCA AGAAGAGCCCA NAACCCTTNA AAGTTAGTTC AAGAGAGAAG GGGNGAAGAG ACACT

SEO ID NO:1494: (Length of Sequence = 405 Nucleotides)

AAAAGTTGAC AAAACATAAA GTATCTCTAG ACAGCAAGGA AATAATTTCA CGAGATTGCT AAATTGATGT CAACACCTGC AGTCTAAAAT TTATACAGTT CAATATGTGT CATTGATCA CTGGCATGTC AAATATAGAA CAGCTATGAC TTTGCTGGCC AGTAAATTAT CTAGCAGTGA AAATCACTTT TTAGGAGAGT CGCAATCAAA CATTGTTTAA CGTGGGAGCC TATAAAGATG CAAATTCCTG AACAACAGTG TCTAAGAAAA GTACATTGGG TCACTCTGAA CAGGTGGTAT GAACATTTGA TTTAACTGCA AGATCTNCNG CTNTTTACGG GCTTTGTCAC CATCGNATGA ATCTTACATC CGCTGATGAC TNAGAGCAAG CAGGGGCGAG CTGCCC

SEQ ID NO:1495: (Length of Sequence = 364 Nucleotides)

CGICIAATGA AGAGCTICGA AACITGICIT IGICIGGCCA IGIGGGATTI GACAGCCICC CIGACCAGCI GGICAACAAG
TCIACITCIC AAGGATTCIG TITICAACATC CITIGIGITG GIGAGACAGG CATIGGCAAA TCCACGITAA IGGACACTIT
GITCAACACC AAATITGAAA GIGACCCAGC TACTCACAAT GAACCAGGIG TICGGITAAA AGCCAGAAGI TATGAGCITC
AAGGAAAGCAA IGIACGGCIG AAGITAACCA TIGITGACAC CGIGGGATTI GGAGACCAGN TAAATAAAGA IGACAGCIAT
AAGCCGNIAG IAGGNIATAT IGATGCCCAG TICGAGGNCI ACCT

SEO ID NO:1496: (Length of Sequence = 370 Nucleotides)

GICTCITIGGA GCAAGGACCC AGTITATICAT CITAATICIC AGGGGAATCT CIGTAGAGAT GAAAAGCAGG AGAACCAAGG
CAGCCIGGIC TCCCIGGGIG ATGAAAAACA GACTAAGAGC AGGGCTIGC CICCAGCTGA GGAGCTICCA GAAAAGGAGC
ATGGGAAGAT ATCGIGCCAC CIGAGAGAAG ACATTGCCCA GATTCCTACA TGIGCAGAAG CIGGIGAACA GGAGGGCAGG
CITACAAAGAA AGCAGAAAAA TNCCACAGGA GGGAGGCGC ACATCINCCA TGAATNIGGA AAGAGITTIN CTCAAAGCTC
AGGCCTTAGT AAACACAGGA GNATNCACAC TGGIGAGAAA CCCTACGGAT

SEO ID NO:1497: (Length of Sequence = 376 Nucleotides)

CACACACTA CAAAATCIGI CCATTIGCCG GAGNATNIG TATGTATGIN AGTIGGAGGG TATTAAAAAT CAGITTTATT
CCAAAGATTI AAAACTAGAC ATGACTTAAA AACAATTICT GGAGCACTGC TIGCTGACAA TCTCGTAGIT CTCTGCTGCA
TTTGAGTGCA TTTTGTGGCC AGTCCATCAG GGCGTACCAT GGGATTATAT TTGAATGTGT GGTGCATCCT TCCTGGATGA
AGGATGTGTG AGGGACCTTG AACCTCAGCT GTATTAAACT GTAGCGCCTC CAGTCAGTGC ACTAGATGAA ACTTTTAGAC
ANCCIGAATT CTGTTGGGTC CMTTCTTTT CCTTTATGTA GGCAGNCTNC AGCATG

SEO ID NO:1498: (Length of Sequence = 281 Nucleotides)

TTTATAGGAC TICTAATCIA ATTINCCTAT AGIGIGACTA AAAGGGAGGC AAATTATIGG AACGGATTAT TCAAATGGNI CCTTAAATAT TGCTATGIAT AATAAGCCAG TTATTATATC AGGACCATGT TCTCTGTAGG CCACTGTTT NCTCTCTCAT TCTCCAGTGG CGGCGGGG GAAGGCGGAG GCAGAGGCAG CAGCAGCCGC GCTGGCTGCA AATGAATGAN CCCCCAGCTT GGGGGGAGGA CTCCAGGTGA GCCTCTGCCC TCGGGAGGCC C

SEQ ID NO:1499: (Length of Sequence = 395 Nucleotides)

TTTTATCACA CCCTGTTTC CAAGGGTCCT GITACGTACC ATTCACCATT CTGCTTAGCA ATGGCTTGTG AGATGGCATT
TATTCCTTCA GCATGTATTT TNATGTTCAC CTTCCTCTCA CCTAAATTCC TCCCCCACCC CAATAACAAT TAGTTGTTCT
ATTTGCATGT AGCCAGAGCA AAAAATGATT TCTTTCCCTT AAGTTACTAT TATTATAAAA GGGACGATAA ACACATGAGT
CATTATACCA CAAGTATAGT GTGGAAAGGA CTCTAAACAT AGGCTCACTG AAGAAGGTGG CATTTGGGCC AGGGCTCAAA
ATAAGGCAGA TTCAGATTTG AACTGAATAG ATGGAGGAGT CATTTCAAAC AGAAGGAATG NCATAACATG TGGAG

SEO ID NO:1500: (Length of Sequence = 272 Nucleotides)

CTEAGIAACN GITCCCAGTC GGTCCCACTG GTCACAAAIT TINTGGCACC GATCATTGAC ATTCACAGCG TCGTGATAGT
CCAGTTCATT GAGCTCCTGC GCGATGGCTG CCAGTTGCTC CACGCGGTCC TGGTGCGCTG CCAGGTCGCT CTCGAACCNC
TCGTGCTTCC GCAGCAGAGC CCGNACCTCT NINAGCGACG CCGACTCGTA ATCCTTNTGC AGCAAGATCT GCTCTTTGCC
ATAAGCCCAA GTCTCGTGCG TTGAGGCCTT CT

SEQ ID NO:1501: (Length of Sequence = 394 Nucleotides)

TTTTTTTCC TGGACCTGIC ACAAGCTITA TIGICCOGAG CACAGACTGG CCACACTTCA ACAATTCCAC TGTGGGGAGG
GGAGGGGTGA ATGAAGGACC TGGGGAGGGG ACATGCCTGA GCCACANCCG GGCCGCCACA CGGGGGGCC TGAGAGGGCCC
ACGGAGGCACA AAGCTCCCAA GGAAACCGCT TCTTGGACAC CCGTCACCAG GAGCCCACCT CCGGGGGCTC AGNTCCTCCC
GGCACCCTCC TAGATGGACC TCTGGCTGIT AGTAGACTAA TCGGTGCCCC TACCGATGGG GCAGAGCTGC CTGATTTTTG
CTAGAAAGAG CTGTATTTGA NCCINGGTTA GGNCACTAAA GCATCGTTCT AGACGGCTGT TAATAGAACT NCAT

SEO ID NO:1502: (Length of Sequence = 373 Nucleotides)

GAAACAAGGC ATAATGTTGT CACAGAATCA GAGATCCAGT CTCACTTTTC CACAAATCTC CAAATCTCCA GTCTTATCTT
GTGTGCTCTA ATGGTTTGGT TCAATCCCTT TCCAACTCTT GTTTTCAAAG CATGGGGCCT GAGTGTTCTC CACTCCTCCT
AAGAAAGGAG CTTGGGTGGA AGGGACCATG CTGACCTCCT CCATCAGAGG GCTCTTCCAG TAGTATTCTC GGATGCAACC
TCCATTTCTC AGTTACCATT ATTTCCTGTA TCAGCTTTGT CCTTCCTGGN GGGATGCACA GTGATCCGGG CCACCACTGT
TGTTGTCTTG TGCTTCTGCT CTTTCCTATG GTTTCAGGNT ATTTTCTGGG GTT

SEQ ID NO:1503: (Length of Sequence = 266 Nucleotides)

CNCAACAGGC CAGINITTAA AGAGGGICAA GIGGAGGIGC ATATICCAGA GAAIGCICCC GIAGGIACCI CIGIAATICA GCTCCATGCC ACTGAIGCAG ATATAGGCAG TAAIGCTGAA AICCGGIACA TITTIGGIGC CCAGGICGCC CCIGCAACCA AAAGACTCTT TGCTTTAAAT AATACTACTG GGCTGATTAC ANTTCAGAGG TCCTNNGATA GAGAGGAGAC AGCCATTCAC AAAGTCNCAG TGCTGGCTAG TGACGG

### SEO ID NO:1504: (Length of Sequence = 311 Nucleotides)

ACTEGATEGA TETTIGATCI ETETTEGICA TGAAGITEIT TITTITTITI TTAAAAAGAA AACCATGATC AACAAGCITT GCCACGAATT TAAGAGITIT ATCAAGATAT ATCGAATACA GCATGGGATT GGGAAAGITA ACTAAAGGTA TITGAGCITG CACTGGATCI TGAAAGGTAG AAAAAGGGAG CAGGAGGAAA CTCATCCAGG TAAGAAAAAT AGACTGINCA AGATGGGCAT GAGAAAACAGT GAGGTCCCNN GCTGGAGGTG GGTGCTAGTC ATGITGAGCA CTNCTGGCAG GAGAAGGTTTT T

### SEO ID NO:1505: (Length of Sequence = 363 Nucleotides)

CCACTCATGG CAGAAGGGA GGGGAGCTAG TGTGTGCAGA AATTGTATGG TGAGAGAGA GAAACAAGAG AGAGGGAAGG GAGATAGCAG GCTCTTTTCA ACAACCAGCT CTCATGGGAA ATCATAGAGT GAGAACTCAT TCACTACCAT GAGAATGGCA CTAGGCCATT AATGAGGGAT TCGCCCCTAT GACCCAAATA CCTCCCATTA AGCTCTACCT CCAACACTGG AGATCACACA TCANCATAAA ATTTGGAGGG GTCGAATATC CAAACCNTAG CAACTTGGAA CCACCAGAAG CTGGAAGAGG CAACGAAAGA TTTTINTCCTA GAGGCTTCAG AATAAGGTAT TGCAATTCTG AAA

#### SEO ID NO:1506: (Length of Sequence = 177 Nucleotides)

CGGACAGAGC AGGCAGAAA AATGAGGGAA GGATGACAGA AGCTCATCAG AAAGCCAGTA ATACATAAGA TTAGTTTINT CAGCAAAAACC TNGTAAACTT TGACGTTAAA AGACAAATAT TTTGATCTCT CATTCCCACT CTCAAAAAAGG TTTCTAGTTC ATATTGTTTT GCTAAAA

#### SEO ID NO:1507: (Length of Sequence = 345 Nucleotides)

CTTGCTTGAT TTTCCCCTGT GTGTCAGAGÀ ATGTGCACAT TGAAAGAGAG GGAGCTCTCC ATCACCAAGA GAGCCCAAAA
ATAGCCCAAC TGATCATAGC CGITGTAAAA ATATTCATGG ATGTAAGGAA AGATCCTTTC CCAGTCTGAT GCTCCTTGAC
TTGTGATTTG CTAAATTTGA GAAGCCATCA CTTACACAAC CTGTTTTATA GACAAATCCT TCCAGTTTCA GAAGAAAAAA
TGTCATCTAT CTC::::CCTCC ATCTCTTTT CAAACTTCGA TAGATGAGAA GAAAATGGTG AAATAAATTT TTTAGAATCA
GTTTTGCAAG ATTGGTTTC AAGGA

#### SEQ ID NO:1508: (Length of Sequence = 326 Nucleotides)

AGTTGGATTT CAGCTACTCA GAGTAATTGG AAAAGGCCAC AGCCTGGTGG GCTTCACAGC TTTCAGAGAC CTGGTAGGGG
ATGGCTAACA GGTTCTNCTG CCAGGAGACA AGTGGCAGAC CCAGGTGTGA AACTTTTACA GGTCCCACCA AGCCTTTCTT
ATGGAGCACA GAGCATAAGG ACAACTTCTG CAGAAATGGA ATGGGGTACT TGGAACCAAA AATACATACA CCTCCTTTCC
CACCTGCCTC CAGCTTAGTA GCCCATAGTC CTCTTTGTCC CTCACACTGA GCCAGGGCCT GNCTTAGATG ATGAAATGCA
TGGCCT

#### SEQ ID NO:1509: (Length of Sequence = 329 Nucleotides)

AGTATGGGTC CCTTGGTACT ACTCAAGGTT TACAATATTG CATTAAACAC ATTGAAAAAT ACACGAGAAC CTTGAGGGAT CACATTTTAC TGCAATATGT GATTTCCTGG TGAGACTCCT TGTGCAGAGA TGATTAGCTC ACAGAGCGTT GTAAGCACGT ACTCGCAACA CCTGAGCATG CCGCAATGGC AACAGGAGGT ATCTTCACAA TTATGATGGT AGTACAGTAT GTACTGCAGT TGTTTACACA GTTATGATTT AGTACTACAT CTTTACANIT GGNTATTINC TINCIATTTT GAATGGTATG TACTGTCTGT GTGTACATA

WO 93/16178 PCT/US93/01294

351

SEQ ID NO:1510: (Length of Sequence = 247 Nucleotides)

TAGGAAAGAG TAAGANCTIC TITINCAGGCT GGAGGIGCTC GTATGGIGGG ACAGGAAAAGA GAGGGGCAAC ATGGCAGACA TACCACGGTT CCTACAGAGA TTAGGGGCAG CCCTGGCCCG GGAAGTACAC AGGGCAGAGA GCTGACTCTC AGGCCAGGAA GGAGTTTAGC TCTNACCCAT CCTCANGGAC CACGGCTCTC CCCCAGCCTC AGCTGACACA CACACAAAGG AGGCTTT

SEQ ID NO:1511: (Length of Sequence = 369 Nucleotides)

CCACTIGCTC CITIATIAAC TGINCITCCT GIAGIGIGIA TITIGGGATCC ACTGGGAATC ATAGAAAGGA ATCAGTGCTA
GGNICIGITG GGATIGCACC CIGAGGGATG TGGCTTTGGC TTCTCTATCA ACCTITCTGT TCCCTTGTGC TATAGGAGTI
AAGTCCCTTT NATGCCCCCT ACAGTGGATT ATAGCTATGG CCTGTGGCAG GIGIATTGTT TACAATAGCT GAAGAATTTC
AGGCCCATGC TTTATGGGGG AGGGTTTINC TAGCTAGTAG TCCCCTTTCT TTCTAGATTG CAGCATAAGC GIGAACCNCC
AAGGAATGCC ATATTTTAGA ATCCTGTNAT AGGATGGTTA AGGCTTTTT

SEO ID NO:1512: (Length of Sequence = 236 Nucleotides)

ATGCATTAAG AAAAGACAGC CAAATGACAG ACTGATAAAA TATTTTCATT ACAAAATTGG TIGAGAACTA CCGIGIGACG
TAAATGAAGT TICTATTACA CATGIACTAA CAGAGACTIT TCATTACATA TICTAGGATA TATTTAAAAT ATATGTATAT
TTIGATATTA AGGGAATATA TITTGTTGTC ATTTTACAAT GTGTAACTAC ATATATATTA NGGCCTTTCC AATAAA

SEQ ID NO:1513: (Length of Sequence = 408 Nucleotides)

CATTAATATT CTCAGTGTTG GAAATATTT NATATTGCCA AGACCATAAT GTGAGGNGTG CAGCTGCATA ANTCCCTGAG
AGAAGATTAG TGGGGCTAGC ACCTTACAAG GAAAGACAAG CTTGTTGGCT GGGCCCAAGG ACAGTCAAAT GTCTGCCTGA
CAATCTCCAC ACAGAAGGGT TGCTCAGATC ACTTAGGACA CCCAGAAAGA GCTCACAAAG GGCAAACAAC CTAAGGCTGN
TATTCTCCAT CTAGGGGTAC TTACCTGGGA ACTGAGTGGC AGTGACAGG AAGCAGGGCC TGGGCTAGGG AGACCCTCAG
GAGGAANGGG GACCCAAGAA GTTAGAAGTC CATTCATTCA TATACTCATT CATTCAGCAA ACATGCGCTT GACACCTTCT
GTTATGCT

SEO ID NO:1514: (Length of Sequence = 359 Nucleotides)

TINNCCAGGC TGGTCTCAAA CTCCTGGGCT CAAGINATCC GTCCACCTTG GCTTCCCAAA GINCTAGGAT TACAGGCATG
AGCCACTGIN CCTGGCTAGA AAAININTIT TIAAAAGINA GGATGIAGAA TINCCTAGCT ATGIAGGCAA GGCAGGAGGA
GAGGGGCCCA GTTGGGAAGC ATAGCCCCACA AGAGTATGAG GGCCTGANCC AGGATGGTGG CAACAGGGAT GGAGAGGAAG
GCGTGCCAGG GCATGGTGGC TCACACCTTA TAATCCTAGC ACTTTGAGAG GCTGAGGGAG GAGGATCATT TINAGCCCAA
AAGTTAGAGA CCAGCCTGGG GNAACATAGT TAAGGACAC

SEQ ID NO:1515: (Length of Sequence = 343 Nucleotides)

GAGCCCCTTG ATGGCAAGAN CTGACCCTTC CATCCTGGAG AAGAGGAGAC CAATTINATA TTATGGAGGC AGAATATACA
GGACTGTGTG ACTAATTCGA CATGTGTGTC CATGGAGCTT GAAGGGGACA GAACCACAGG TGCAAAAACTG GTGTAGGTAG
TGCTGGCCAT TGCTCAGAAC TTTGTGTGAG TTGAGCCCAG GCCTCTGGTT GCAGGACTCG TGAATGGAGC AGTTCTGAGA
ACCACCCTTT TGCTCAAGGGA GCTTNGGAGC CACATGGCTG CTCCCTTCAC ACTGGGTAAC AGTGTAGTAT CCTGTGAGAG
AATAAACGTA TTCATTTAAA AAG

SEQ ID NO:1516: (Length of Sequence = 380 Nucleotides)

TITITGCCTTA TICTATCCGA TITITTICCCT AAGCITCTAC CIGGNATITIN CCTTTGGAAA AGICTCTGAG GITCCACCAA
AATATGGAAC TINATITIGG ACACITTGAC GAAAGAGATA AGACATCCAG GAACATGCGA GGCTCCCGGA TGAATGGITT
GCCTAGCCCC ACTCACAGCG CCCACTGTAG CITCTACCGA ACCAGAACCT TGCAGGCACT GAGGTAATGA GAAGAAAGCC
AAGAAGGTAC GITTCTACCG CAATGGGGAC CGCTACTTCA AGGGGATTGT GTACGCTGTG TCCTCTGACC GTTTTCGCAG
CTTTNACGCC TIGCTGGCTG ANCTGACGNG ATCTCTNTCT GACAACATCA ACCTGCCTCA

#### SEO ID NO:1517: (Length of Sequence = 411 Nucleotides)

TEAGCAAAAC ACAGAGGACT GCACCTCTAG TGGCTCGTAA TGAGAAAGAA GATGGTCTCA AACCTGAGAA AGATAATGTG
GAGTIGGACCT CTGTTGTCTC AGTATTAACA GICCCTTCTA GGAAGTAGGT AGCATTTCTG AAAATAGAGT GAAGCAATTG
ACTGATGGAT TTAATCTTTA AACTGCTTAG GTAACCATCA ATCTGTAATG AGCTTAATAC TCTTAACTAG GTGCTATTTT
NCATGTGTGC TACTTTGCCA GTGATAAAGG ATTACGAAAA ATTCTTTACC AGAGGAAAAA AAAAAATTGA ATGACCTTTC
TTGGGAAGGT GGTCCCTTGT TTGTGATCAA ACTTTGACAA GAACTGGTAA TTAATTTCCT CTAAGGAATT NACCGTTCTC
ATAGTGTGTT T

#### SEO ID NO:1518: (Length of Sequence = 388 Nucleotides)

GETGSCCAGC TTCTCTCTGC AGCTGCTCTC CCATCATCTG GCTGAATATG GGGCTTTNAT GGGCCTCAGG GGAGGAAGTG
TGTGCNAAAT GGTCCGTGGG CAAACATGGG CGGGCCTGGA AAAGGCACCA CAAGTTCCCA CCCCAGTCAG TAGGATCAGC
AGTCTGACAC CCAGGCTTCA GGCCCTCCCC GACTTGAAGG TGGTGCTTCA CCCAAGGACTC ACCCACTCCT GCCCAGGAGC
TTGTNTGCCT CCTGCTGCCA TTTATGGTGC CCAGGCTGTT TGTNCCAAGG AGTGTCTGTG GGCCAGCNCT GAGCTGCCCT
CAGCACCCCC TTGGCCTCTT TTCTGTNCTC ATTGGTGCCC AAAGTCCGCA GCAGGCTGAA GTGGCAGG

#### SEO ID NO:1519: (Length of Sequence = 358 Nucleotides)

TIGGITAAGA CCAAAGICAG ATCACTCCCI CCIAGCICCA AACCIGCAGI GGCTCCCAAT TCINICAGCA TACAAACCCA
GATCCICAGG CIGCCATTIN TGGGCIGAAT CCIGICCCIG CIGICIGAIC CCACCAGACA TAATGGAGGC CIGAGGITCC
CIGAACACIC CIAGITTAGC CITAAGITAA GIATITGCAC ATGCIGGITC CIATGCCIGA GATAATGITC CACATTINAT
CCCATIGCII GCCAGAAATA GAAACCCIIC CACATAATIN CAAAACAGAG TITACANCAC AGAGCITIGG GIGACIGCAG
GCCTCCAAGA ANGGNAGGCA GAAGGGGCAC TGAAGAGT

#### SEO ID NO:1520: (Length of Sequence = 379 Nucleotides)

CCAGAGITAA ATATGCCCAG GCTGAAAGAA GGTGTATAAT GTATGGNCGT NCTTATACCA AATGATTTCT TTGGAATTTA
AACAAATATG TTTAGTATTT TATTCCTAAT TTAGGAAGAA AAAGCAACTA AAGTTGINCT GACATTGTAC ACAGATGAGT
AGCACGTAAC TTTTATTTAG TAAGCCCCAT AGGATAGTAN GGNATAAAAG TTGTTAGTGA GCAAAACAGG AGTATCCTGC
CATTTGCTTT AATTCTNCTT GTGATAGTTT TGAGGGTACA ATAATTCCTG TGTGCGTGTC ACTCAAGCAA ACCAGAAAGT
GTCTTTTGTA AATACGCATT TTGGGCCTCA TCCTCATGGA GGTTCCCCGTT GTTTGTTGG

#### SEO ID NO:1521: (Length of Sequence = 339 Nucleotides)

GGGACAGGAA GCCTCTIGGG TIGGACTCAG ACTCAGGAGG TGACTCAAGC CTCAAGCTCA GAAGCCCTCT GINACCATCT
GITGACTCAG AAGCATGCCC ACCATCCCAT GCAGIGCCCT TCCAGGCACT GTCCTGTAGC AGACGGAGTT CAGGCTTIGG
AAGTAGACAG ACCTGGGTTC AAATCACAGC TCCGCTTCTT CCGCCTGAAG CTCCATAACC TAGGATAAAG TCGCTAAGCC
TNCCCAAGTC TCAGATTTCT TACCTCTAAG GTGAANGGAT TGGATTCCAC TTTACTTCCC CCCTTTTCCC TTTANGGACT
CTGCATCCTC NTTTGCTTG

SEQ ID NO:1522: (Length of Sequence = 405 Nucleotides)

GIGAATITCA AGCAATIGIT AATGGGGACC AACAGGGCTG CATTAAGAAA ACCACITINN ACIGATCICT CCCCCACATA
TITITAATIT GICTIGCTIT GITTATITIG GITATGCAAG TCCITTCTCT TCATGAAACA AGIGIAAGGC TCTAAGGCTA
AAATAATAGI TATTITITGIG GGCCCCAAAT AGCTACITIT GAATTICTIT CTTTAGTATA TCTCAAATCT GGGGAACATG
GAACTIGAAG ACTCCTAACC ATGAAGCATT TGGAAAAATA CATATCATTC ACTTTTCACA GAACCATTIT CTTAAAAAATA
AGGGGGCAAT ATCCAGATTC ACATGCATGI TCATAAATAA AGCTTTGGIT TTAAAAACAAA TCCACACCAG CAATTATTTT
CAGGCT

SEO ID NO:1523: (Length of Sequence = 284 Nucleotides)

AGNICACAGA ACTCCAATTC TTTATTAATC ACAGCTTGCT CACAATGACA TACAGGAAAA TAGCACTAAT GAAGNGTAAA
TATGCAGGCA GCAACCTTCA GGAGTTGGGA GATGGGGAGA AACGNCTTCA AAACTGCGAT AGGTACTTAT GGTGGGTATC
TGGTGATTCT NAGTTGGCAC AAATGCCCTG CCTAGCCCCC TTAACTGCGT CACTTTCACA GATGGNGTGT TTTGTTGTTG
GTGTTGTTAG TAGGCAGGAT TGCCTTACAC TGGGGAAGAA AGAC

SEO ID NO:1524: (Length of Sequence = 299 Nucleotides)

GIGCTIGIAC GIGACAGTIT TGICIGATCA CATTITAGGA AGATGATGCT GITCTINCTT CITAAGTAT TATTITNATC
AGTCAAGTGA TAGGAAGTIC AATTICAAGT ACAAGACATT TGGATCAAGA AGTGACTATT ATTTATTITAT TINAGATGGA
GICTIGCTCT GITGCCCAAG CIGGAGTGCA GIGGIGIGAT CICAGCTCAC TGCAACTTCC TCCTCCTGGG TICAAGCAAT
TCCNCTGCCT CAGACTCCCC AGTAGCTCGA ATTTACAGGC ACCCACCGGG ACCAGTGAA

SEQ ID NO:1525: (Length of Sequence = 398 Nucleotides)

GCCCATEAAG CAGCTCTCGT GGATTGGAGT CTCATGCCTG CAGCTCTCCC ATACTGGAGT TGCATGCTGG TGGTCCTACA
GTGCTGGTGT CTGGGCAGTG GCCTCACTCC CATGGCTCCA GGAGGCATTG CCCTGGTGAG GGATCTCTGT GGTGGCTCTG
TCCCTGTNAC AAGTTTCTGC CTGGGCTTCC AGGCTGTCCA TGATATCCTT TGAAAATCTAA TTGGAGGCTG GCATGACCCC
ATGGCTTCCA CACTCTGTGC ACCTGCAGAA TCAGCACCAT GTGGACACTG CCAAGACCTA CCTACCACTT GTGCTCTCTG
GAGCAGCAGC ACAAGCTACA TCTGGGGCTG CTTGAGCCAT GGCTGGGGCT NCCAAGGAGC AGAGTCCTGA GGGTGGCC

SEO ID NO:1526; (Length of Sequence = 318 Nucleotides)

GICTCICICI ACTGCACCAT GATGCCTITA AAAAGAATCI AGGGGCTGGG CACAGTGGCT CACGCCINIA ACCCAGCACT TIGGGGAGGG TICACTTGAG CTCAGGAGCT CGAGACCAGC CTAGGCAACA TAGTGAGACC CCCGINICCA CTAAAAATGA AAGCAAATTA GCTGGGTATG GTGGTCCATG TCTGTACTGT GGTCTAAGCT ACTCGGGAAG TTGAAGCAGG AGGNTCACTT GAGCCCAGAA GGTCAAGGCT GTAGTGAGCC ATGATTNIGC CACTGCATTC CAGCCTGGC AACACAGTNA GACCCTGT

SEO ID NO:1527: (Length of Sequence = 313 Nucleotides)

TIGGCTAGAA GGGAGGCTGG AGCCTITCAT GGTGGCTTTT GAATGCCATG GTGAATAGTT TGTCCTTTAT TTGTNATTGA
ATAGCAATTT GTACACTTCT GAGCTATTAG AGTGAAATGA TTAAGCCTGT GGTTTAGGAA GAAAGAGCCT ATTAGGGAGA
TAAATCTTTC CCTAGTTGTA GGAAGGGTTG GAACAGTATG ATATGGAGAG GGTAGTAATG AATGANGGAA TNGAAAAACGA
GAATAATTTC AATGATACTG GAGGTGCAGT ATACAAGTTG NGCAGTAGGT TTATGTCTAG GAAGATAAGA AGT

SEO ID NO:1528: (Length of Sequence = 405 Nucleotides)

GCCGTCGCTA CCGCCACCGC CACCGCCACC GCCGCCGAGT GCTGTCTCTA TGGCGAGGAG GAGGAGGAGG AGCGCGAGTC AGCGACACAA GTACATAAAT AAAGGATAAA ATATTTTATG AAACAAATCT TCAATCAAGT ATAACATTTT GATGCTTGGC

ATCIAGACTO COTTGIGCCO TOACTATGCO AGCGGAACTG TAGATCATAG COAAAGAATT TGTGAAGITT GGGCTTGCAA
CTTGGATGAA GAGATGAAGA AAATTCGTCA AGTTATCCGA AAATATAATT ACGITGCTAT GGACACCGAG TTTCCAGGTG
TGGTTGCAAG ACCCATTGGA GAATTCAGGA GCAATNCTGA CTATCAATAC CAACTATTTC GGTGTAATGT AGACTTGTTA
AAGAT

### SEO ID NO:1529: (Length of Sequence = 241 Nucleotides)

GAAGGAGAAA CACTICITICC CICCATAATI CAGACAGIAA ACTGATCGCI GAGATTGAAG TITGCITGIT TCCIGGGGAA GCTINAAGAT CCICGIGGGA CCACCATCCC CIGCICAGIC CICCCIGGAA GGGGGCACTG GCIGGGGTATG AGCCGCTCA CCGITGGGIT TGIAACTI'IN TGGATGGIGC CIGGNITICA CCIGGGGCIG GCIGAGGAAA GGGGAGGCGG TAGGNGTCIG C

#### SEO ID NO:1530: (Length of Sequence = 356 Nucleotides)

GGTCTCATGC AAGGGTTTCC CATGCCTGTA AGTGTGTTTG TAATCCCACA TGTATCAGGT GCCTGGCTGC TCTGGGACTT
GCAGTAATTG TCTCTTGTTT GTTTCAGGTG TGATCCCCTG GGCCCGTTTG TTGTCGGGGG AGAAGACTTA GACCCTTTTG
GGTGAGTACT GCTGGGGAGG TGGCAGCAAC ACAACTTGCT TTTNTGGCTT TINAGCCCCA GCTCATCTTC TAATTTNAGA
GTTTTCCGTC AGTCTCTTCC TTTGGGGATN GAGGAGGCAG TTGTTTGCTG AGCAGCTGAG AAAGCACTGC CACATACGCT
GGCCCCTCCA CACCTAGAGC GGTGCAGGAG AGCACT

#### SEO ID NO:1531: (Length of Sequence = 379 Nucleotides)

CCAACAGATG CIGCTACGIT TCCTTCAAAA TIGITAAACA TCTCTIGCGG AAGAAGCIGC TIAGITATAT CCAGCGATTG
GITCAAATCC ACGITGATAC AATGAAGGGT GGGGTATCTA GCAGGATGIC TAGITCACGC ACTGGGTGAA AAACAACCAG
AGCIGCAGAT AAGIGAACGA GATGITCTCT GIGITCAGAT TGCTGGACTT TGTCATGATC TCGGTCATGG GCCATTTTCT
CACATGITTG ATGGACGATT TIATTCCACT TGCTCGCCCG GAGGTGAAAT GGACGCATGA ACAAGGCTCA GITATGATGT
TTGAGCACCT TATTTAATTC TAATGGGATT AAGCCTGTCA TGGAACAATA TGGGTCTCA

### SEO ID NO:1532: (Length of Sequence = 307 Nucleotides)

GATAAACTIG AGCCACCAAG AAGIGGACIC IGCCIAGGAA GACAGIITIGC IGAAGIITAGA AAGIACIGGI CTAGGAACCA
GAAAACCIGA ITCINCCCAA GAGIITAGAAT IGINAGINAG ITCIINCIGG ITIINAGIIT CCIITATCIGI AAAATAAITA
CCCAGIITCAA ITGGATAATC ICIATGATCC CIICCACATI CIGCATACII GGATATCIAC IGIITCIAAA TATTIIGGCA
ITICIITATAA AGCCCIITCA CATTINCIIT AITATTIITIC CCICCACAAGA ATTCCIGAAA TAGGATA

### SEO ID NO:1533: (Length of Sequence = 337 Nucleotides)

ATGCCTTAT TIGCTGATTG AGAAGTGGTC CAGCCGTGGG CTAGCAGTCA TITACATATC AGTGACCAAA TGCAAACATA CCCGTACTAA CAGTGCTTTG GTCCATGACA TACCCTTTTG ACAGCCCAAA GCTGAAACGT CAACTCTATC TGGGGTTACT TGCTTATACA AAGATGTTAC TCTAGCAATT GTTGCTTGAG GGCAAGACCN GATGATTGTC ACTAGTAGGA AGAAAGCAGA AGTGATGCAG CTTACACTGC ATAGTCCCTA CCCTTNTGGA TTAAATGGAA AAGTTGCTCA AACATAAACT TGTTCTTAAC AAAGGTGGGT AAGANTC

### SEO ID NO:1534: (Length of Sequence = 317 Nucleotides)

ATGGCCATGT GGGTACTACG TITAAATATT TAATTATTIT AAAAATAAAA TAGGAAAGAT AAAATAGCTT AAAGTGTATT GAGGCCTCTGA ATAACTTTAT GAGTGAATAG ATACCGTAGA TIGAAGTCAG TGTTTTGCAC AACAAATCAA GATTTGGGAC TGGACTTACT GGGTTGGGGA CTTCTTAGGG ATAACGGTGG TGCTATGAGC ATGCTGGAAA GATGAGAAGC AAAAGCCTGG

355

AATTGGGAGT CCTGTACTGT CTTTAGGGTA TGCAAAGAGG CTCCTTCTTT TCTAGGTGTT CATCAGTACA ATATGAC

SEO ID NO:1535: (Length of Sequence = 323 Nucleotides)

ATATTACATT GATGTCAGTC TTTAAAGATG GAGTAGGACT TINCAGGCAG CAACGAAAGG GAAGGACATT TCAGAAGCAG
AAATACCATT TGTTAAGGGA TGACAGCCAA GAAATATTAA AGCATATTTG GAAAGTATTG AAAATCTCTG TGTGGCTAGA
ACTTTAGATG AAGAATCAGA TACATCTGGA GAAGGAGATT NAACCNGATG ATCATAAAGA ACATTTTATT TAGGCCATGG
TAAGGCTTGG GCACTNTGGA GCCCATGAAG GTTTTTGGAC AAGGGAGTTT CCTTAGGGAG GAGTATNAAG CCATAAACCA
AAT

SEO ID NO:1536: (Length of Sequence = 305 Nucleotides)

AACCACATIT TTACTGCATC TNCTCCACGC TGGATTCCAA CATGCTGGCC CGGAGCGTGG CTGGCTGGAA GCAACTCCAA CAGGTTTTC CCTTCCCCGT CATGTACATT ATTTATTTTT GATCCTACTC ACTGTCCCAA GTCCAGAGGC AGTTACAAAA AACACTCTTG ATGCAAACCG TGAGTGGCTA CAACACACGG ATGGGGGTGG GCGCGATTCC CACAACAGGG AGTGGAATCC GGGGAAGATG ATATATAGGG GCAAGACGC CCCTTACTTT GCTAAGAGTA TATGGGAGCT CAAAA

SEO ID NO:1537: (Length of Sequence = 279 Nucleotides)

GGTGGCAGCG GCGGCGCGC GACTGAAGCG CGCGAAAAGC TGAGGCGGCA ACGTCGGGGA CGGCTGCNCG GGACGGCTCT GTAGGAAGGA ACTTGGTTCC CCCTCCCTCA GCTTCCGCCC CAAAAGATTC AGAATGGACA GTTTAGAAGA ACCTCAGAAA AAAGTCTTTA AGGCTCGAAA AACGATGAGA GTNAGTNATC GTCAGCAACT TGAAGCAGTG TACAAGGTCA AAGAAGAACT NTTGAAAACT TGATGTCAAG CTGTTAAATN GCAACCATG

SEO ID NO:1538: (Length of Sequence = 310 Nucleotides)

ATATTICCIT CIGCICIGAC TOOGGAAGAA CITGCACIGI TGCCTAGGCI GATAATCCCC GAAAAAAAGI AACAAATGCA
ATINTACCCC CCACCCCCAT ATACAGCCCI CATATATATA TATGAGAGAG AGAGAGGAAA AGATCATGAG ACATGICITC
TAGGGAAAAA AAATICTAAC TICCCTAGCC ACIGIAGICA TITGAAACCI GAGTTAGACT ATGAGTTAGG AAGIATITTC
ATAGAGITCA ATTAATATAT TICTGCICIA TGCATGGATG CIAACAGGTI TAAGGAAACA CAAAAGCCAA

SEQ ID NO:1539: (Length of Sequence = 267 Nucleotides)

GAGATITIAC TITIGIAATOG AGIAATITIAG CCACACICIT GIGAGGGAAC AAGCCAGAGC CAGGACCGCA TATIACCCGG
TAAAGCTGCA GAGAAGACIT GAGACITGIA AGATTGENCC NGGCTGCAGT CCCGTGGTCA GIAACATCTG CAACATTATA
CAGCCAGCAG ATCAGCTCTT CCAGCTGACA GCAAAATGTC TTCACACATT GCACCAGTGA TTCTTTTCCC TGTNCTCCTC
CITTCCTGGG GAAGCTGCCC TINAACA

SEO ID NO:1540: (Length of Sequence = 354 Nucleotides)

ATTIATICAS ATGAAAAAAA ATCAAGGCTT AATTIAAGTA ACTIGICCAA GGTCAAGGAG TIGACAAGTG GCIGAGCTGG
AGTICAGCAT CTCAGACATC TTCCTITGAA TCCTIGCCTT CCTTGTGAAT TTCAGATGAC GGAGCATGAC GGCIGCATGA
TTATGGGGTC ACCGGGCCTG TCCTGGGCCT GAGGGACCAA GGATCAGAAA GGGCAAGGAC CAACTCGNTC AGCTAGTGAA
AGTGCAATTG GACANTGATC CTGTTTCCGG GNTTAACCTT CCGCTTGGCC TTTAAGAGGG NTTCTTGAAA TGCACCAAGG
GGGCCTAGAG GAAGCAAGCA AACTNCTTGG ACCT

SEQ ID NO:1541: (Length of Sequence = 403 Nucleotides)

GREATGITAT ATCAGGIAAA ACCIGICIAA GGAGAATAGA CAGTAGITAG TICAACTTAC TCATTACGIA TIAGGAAGAT
TAACCIGGIT ATCATIGITT TATACATATA TATATGNAAT ATATATGAGT ATTCGTATAA ATATAATACT TITACCITGI
TTATGIATIT ACICAATATI CICCITTICC TCTAAAATAA TCTGAAGIGA CTATTATCAA TAAGTITACT ATGCCAAAAT
TCATTAATTG CCITTCACTT AACITITGGG GCCATAATAA ATAATAAAAT GTATTGCCAT AACATTAATA AACTACCITA
CAAAACCACC AATTAAAATC AAACAACCAA AAAGGIGITA TTTACATCIG NNCACATAAA TCTACTAAAA ATACAGGGIT
CAT

#### SEO ID NO:1542: (Length of Sequence = 333 Nucleotides)

CTGGTACATG ANTITATAAA AACATGTCAC GCCCGGCTCT GTGGCTCATG CCTGTAATCC CAGCACTTTG GAAGGCCGAG
GCGGGCGGTT CACAAGGTCA GGAGATCGAG ACCATCCTGG CTAAAACGGT GAAACCCGTC TCTACTAAAA ATACAAAAAA
TTAGCCGGGC GTGGTGGTGG GCGCCTGTAG TCCCAGCTAC TCTGGAAGCT GAGGCAGGAG AATGGCATGA ACCCNGAAGG
CGGAGTTTTC AGTGAGCAGA GATCATGCCA CTGCACTNCA GCCTGGGTGA CAGAGCAGAG CGGGGACTCC GGAGCAATGG
GNAGTACAAT CCT

#### SEO ID NO:1543: (Length of Sequence = 329 Nucleotides)

CCCCIGATAA ACCIATCAGA TICIGIGAGA CITATTCATT GICATTAAGA ATAGCAGGG AAAGACIGGC CCCCATGATT
CAAITACCIC CCCCIGCATC CITCCCACAA CATGIGGGAA TIGIGGGAGA TACAATICAA GITGAAATIT GGGAGGCGGC
ACAGCIGAAC CATATCAGIC TGIATTATCI CICCNITTIT CIGCITTAAG NEACTATACG NAGGIGITGI TITCAGGGNI
TATACATAGG TATTCIGAAA GATGGGGITA TITTCIGIIT CANACTITGA CIAAGIGGCI TCITTIGICC CCTATGIGCC
AGAATAGCC

### SEO ID NO:1544: (Length of Sequence = 313 Nucleotides)

CGGAGATCCG TGATGTAACA AGGATTGANC GAATCGGTGC CCACTCCCAC ATCCGGGGAC TGGGGCTGGA CGATGCCTTG
GAGCCTCGGC AGGCTTCGCA AGGCATGGTG GGTCANCTGG CGGCACGGCG GGCGGCTGGC GTGGTGCTGG AGATGATCCG
GGAAGGGAAG ATTGCCGGTC GGGCAGTCCT TATTGCTGGC CAGCCGGGCA CGGGGAAGAC GGCCATCGCC ATGGGCATGG
CGCAGGCCCT NGGCCCTGAC ACGCCATTCA CAGCCATCGC CGGCAGTNAA ATCTTCTCCC TGGAGATGAG CAA

#### SEO ID NO:1545: (Length of Sequence = 384 Nucleotides)

CCCAAAACCT GGAGCTAAGA ACTICATCIC ACTITIGACA CCCCAGCCC CAAAATATGG AAGCCCAGGA GAGCCAGGAG
AATITATAGC AGAGGCTTAA AGAGAAAGIT ATGATTIGIT TAAAGTAGAG AATAAGGTGA AAAATAAAAC CTGGTACTCT
GTCIGGAAGT CCTGGAAGTC TCCTTGCCCA ACCTCAACTG GCCTGTGGGC TCCTGTNTCC TTGCTCTGGG ATGCCATGGT
GAATGTGAAA ACAGGGGAGG TTGTGTGTGG GGGTGGGAAT GGCCINICGG TTGCAAGGCG AGTCCTTTGC TGAGCCCAGC
CTGAGACCCA GCTTATGGGC TTTATCCAGG TGAGAAAAATN CTGGGGACAT GTGTTCGAGG TTTA

### SEQ ID NO:1546: (Length of Sequence = 345 Nucleotides)

TTTAAAGAAC AATGATTAAG TGAAAATNCT CTCAGTITIT TITAATTGGI TCAGCAATTG ATTAATTACT GAATCITGAC CCTAAACTIT TTAGTCTAGA AATGIGCTIG AGGAATACAG GCIGGAGATC AGCITTITGA CATTGCATTC CCCTCCTGGN TCACATCCAT GTTGGAATCA ATTTATAAAC TGCCTTCCTA AGGCTAAAA TGATGGTGAT CTACAGACAA GTGCCTTCCT AGGCACAGGG TTGCTGGAGA CTGATGCCAG GCCCATGGCT CTTAAAGGGA ACACTGAACT CATGGCAGAA ATGGTGGAAA GTAGAGAAAT GAATAGAGGG GGGAA

SEO ID NO:1547: (Length of Sequence = 342 Nucleotides)

SEO ID NO:1548: (Length of Sequence = 334 Nucleotides)

GGAAATAAAG GTGACATGAA CTAACTATTC AATCATGAAT GGTAGAAAAA AATGAAAATG TAACGAGATG GGATCCGGGT
CAAAGTCAGG GGAGGTATAG TTGAAGATAT TGAAGGAGTC ATTATGATAC CAAAGAAAAT GGAAAGAAGT GGTATCCAGA
TAGGTTATCC TTGGAGAGTA TCCNGGGATG TCTCTTTTCC TAAGACCTTA GAGAAGGAAA GGATGGCTGA TAATATAGGG
AAAAGTTGAC ATGGAAGGAT TAAATAATTT TTTTGAGGAA TTCACGTAAG GNATGATAAT CTGAATTTTC AGGGCTAGGC
TCAGAAGCAG GAAT

SEQ ID NO:1549: (Length of Sequence = 362 Nucleotides)

AGGATTCTGG GGGCTTAGAG AGGGCAGCCT GGAGAAGCCA GAGTTAAGCT CAGAACAAGA GGTGCAGGAA GAGCCACAGC
AGGGAAGGGA AGAGAGATCC CAGAGGAGGG GCAGAGTNTG GCAGGACAAG GGCCCCTGCCG TACATGCTAT GCATGAAGGA
AAATCTTGAG ACTAAGACTC ATGAAAAGNT CCAAAAATAAT TATTTCGTGT GGCCCCTAGA AGACTNAAGA GACATTTNCT
TCGCCATTTG CCCAGGGCTG CCTGGGCAGG AGACAAAGGA ATNAAAAGTC CAGGGGGAAA GCAAAAATCT ATGGGCTTCT
GAACACATGC TTCCCGGAGC TCGTCINCAC AGCATCTTCA CC

SEO ID NO:1550: (Length of Sequence = 328 Nucleotides)

GGACTAATTA ACTAAAGAG TTTTGTACAG CAAAAGAAAC TGTCAACAGA GTAAACAGAC CTACAGAATG GGAGAAAATA
TTCACAAAACT ATGCACCCAA CAAAGCICIA ATATCCAGAA TCTATAAGAA ACTTAAACCA TTGAACAACC AAAAAACAAA
CAACCCCATT AAAAGTGGAC AAAAGTCATG AACTGACACT TCTCAAAAAA AAGACATACA AGCAGCCAAC AAGCATATAA
AAAATGCTTG ATATCATTAA TTATCAGATG AATGCAAATC AAAACCACCC AAGTCTTTTT CTTCTGTCTA GGNTAATTTA
TTTTTAGGG

SEO ID NO:1551: (Length of Sequence = 365 Nucleotides)

CAGGAATTTA CATGGGGAGA CCTACCTATG GCAGCTCTCG CCGTCGGGAT TACTATGACA GAGGATATGA TCGGGGCTAT
GATGATCGGG ACTACTATAG CAGATCATAC AGAGGAGGAG GTGGAGGAGG AGGAGGATGG AGAGCTGCCC AAGACAGGGA
TCAGATTTAT AGAAGGCGGT CACCTTCTCC TTACTATAGT CGTGGAGGAT ACAGATCACG TTCCAGATCT CGATCATACT
CACCTCGTCG CTATTAAAAGC ATGAAGACTT TCTGAAACCT GCCCTAGAGC TGGGATATTG TTTGTGGGGC AATATTTTTN
ATTGICTCTT GTTTAAAAAG TGAACAGTGC CTAGTGAAGT TAGGT

SEO ID NO:1552: (Length of Sequence = 330 Nucleotides)

GATCCAAAAA AATTTACTGA AATAGCAAAA ACGIGGACTT TGGGATTTCC TCTAACTGCT GCAAATTATA ACACAGAATT
GCTCAGIGIT AATACTTGAN TTGIGGGGCC AAGICTTCTG GCTGCCCTAG TTCTCTTTTC TGGCATTTGA AAGCCCTTGA
GCTAGCTATG GAGCIAATCT TTGGACAGGC TTTTTGGTTC CCAGGAATGT CATGCCTTTG AATTTCCAAT CTATATATAT
ACAGTGTGTG TGTATGTATA NCTGTCTTTT CACTGTAAGG CACCINCACC CATCCCTTAT AGAAGGNGGC CACAAACAAT
CAAGCAAATG

SEO ID NO:1553: (Length of Sequence = 304 Nucleotides)

CCCTTGTCCC ACAGCCATT AAAAATCITC TGAAGGGCCT CAGGGCACAA AGTGATCATT TGGGATCCTA AGTTAAAAAG
GAAATGCAAG AGTAGGNTAC TCCAATTCCA GAGTCTTTGC AGGAGGCTAA TCCCACAAGA AGGGTAGCAT CAGAGAAGTG
GGCATTGGTC TTAGTGGTGG ATCATCAGGT AGACAAGTGA TAGTGTGTGT AACCCATCTG AAATTCATTT TACCGTCACC
ACTCTTACAA AGGACAGTTT ATTCCCAAGG ACAGTGCTGA CGGGGAGGGG GACAGGCAGG GAGT

#### SEQ ID NO:1554: (Length of Sequence = 309 Nucleotides)

TETETTACTE ACCATETITT TEAGAGTAGT GCCCCTAACC ACTITETCIC CACTITECATA GTGTAGTGAT TYTNAGGNCT CTGTATGTCA TATTATAACA GAACTGACTG TATATGGCTA TYTTATCCCA TAATCAAGCC AATTCTTCCA GAATATTACC ATCAGTATTA CCACCATACAT CCTCCCCAAAT CTTATTTCAA AGAATAAATA TATAGTCACT CATGGTTTTT AAGAAAACCC AAAACTACTC AACCAAAACC TTGAGGAAGG TTTTTCCAGG GATTTCTACC TTAATTATTC ATAATGATT

### SEO ID NO:1555: (Length of Sequence = 326 Nucleotides)

GITIAAAAAC TGICCAAATG TCATTITAAT TIATGAAGGC ACCCAGAATA AGINCTAATC TCATACTGCC CCAATATATT
INCIGAAGCC AATICTCICI TITATTAATT TITACTGAAA ATAGCACTIT TITCCTCCCC CTGATAGTAC TGGGTAATGT
TAGAATGTCC TCTAAAAATTC TTTGGACCTI ATTTACATTC TCAAGAGNIT TTTTTAAATT TACCAATAAG ATGTGCTATT
TGAGGAATTA GACTTTAGIT CAGTTGTACA TGGNTTATGT CTGCTCATAT CATTCATGTC TGAGNCTTTC ATTTTATTAA
TATGGG

#### SEO ID NO:1556: (Length of Sequence = 375 Nucleotides)

CCCATCCCTG TITAGGIGCT TIGICCTCCT TGAGGAGCCT CCAATGCTGC TGCTCCTATA CATGTCACAA TITCAGACCC AGCATGCTAG GAACIGCTGC CAGCGCCTGG TTAAGCCCAAT ACTAAATGGG GCCAAACAGG TGAACAGACA TICTGTCTTT CTCCAAAACCT CIGAAAAAAGA TICTGCAACT CATCTCACAG TAATTTGTTC CCTAATTTAC TCTTAGGAAA TIGTCGTTAA AGTCTGATTA GGTTAAGTCC AATTCCCTGT AATTAGGATC CTCAGTGAAG AAAAATCTAC CCATCACCAC AATTTATTTT CTTTTCTATA GCTCCAGCAT CAGTAATTGT ACCATTATTT TTGGCAGCTC TGGGG

#### SEO ID NO:1557: (Length of Sequence = 306 Nucleotides)

AATTCCGAAG ACTATTCCTA TACATTAGAG TGAATTINAG ACTATCTCCA TCATTCTCCA GCCATTCTTC AGTGGGAAAA
AAACGGTGGA ATTAAACTAG TGGAAACAAG GCTTTCTCAT CTAGTCCCAA TCCAGTCGAT AAGCTGTGTT TNCCAATCAC
TGCTCCAGCA CAATGGCCCT CAGTTTATTT TTAAGTCTAT GGCATGCCTG AAGGACCATG TTCCCATGAG TGACACCCTT
CTGTAAATGT GGTGGCACAT TATGGGCTGC TGTTTTAGAA GGGACTGNCA ACTTGCTGGG GGTTAT

#### SEQ ID NO:1558: (Length of Sequence = 292 Nucleotides)

AATTCCCCCT TICCAAATGT ATTTCAATC CCTTGAGTGT CTAGGCTTCC TGCTTTTAAG GCCTNCCTTC TAACCCAGGG
TTGCCCCATT CACCTTAAAA CATTTTTCAA TAACCCAGAA AAAACCAGGN TGAACATACC CAAGCTCCGG AACCAGCAAA
TNITGTTCGA ACCCGCTGA TGACTCCCAG GGGAAGCCAA GAGGACAAAG ACAAGGATGA GGACGAGGAC CCAGGGACCG
NTGGTGAATG GCAACTGCTG TCAACTTCAC TTTTCAACCT CAGNCAGTTT GT

#### SEO ID NO:1559: (Length of Sequence = 246 Nucleotides)

GIGGICCGIT CICAGCCCAA CAAGAGIGAT CCITTIAAGG TCCACACACG CIGCCICICC TTCCICCGCA TGAGCCICIG GCAIGGICCI TCCICCAGCI GGCCCCGGGC TGGGCAGAGC CICCICCTGC CGGGGCCCCI GCCCACCCCC TCCITIGCCI GGAGINAGGG TGITCATACC AAAGACGGAA CCAITICGCC TITAAAGAAA ATATATNCAG AAGCAGCCGC TGCCICGNAG CCCIGG SEO ID NO:1560: (Length of Sequence = 383 Nucleotides)

CCAAAGGIAC AACAGATTIA CIACATITAA GACAGGAATC TITICTAATC TCTGTGCCTA TTAAAGAAGC CACCTGCTTA
GAAGTACTIT GTAGATGAAA AAATACTTAT GAATCCACTG TAACTTCACA ATCTTGAATG CCAAGGAAAA ACTTTACTAG
TTTCATTTAC CACTATTCTT TAAAGINCTT TTTGATTTTA TGTTTTAAAT TTTTTTAATTT TATATTTTGA GACAAGGICT
TGCTCTGTTG CCCAGGCTGC GGGGCAGTGG CATAAACGTG GCTCACTGTC ACTTTGACCT CCTGGGCTCA AGGAATCCTC
CCATCTTAGN CTCCTGAGCA AACTGGGNCC ACAGGCATGC ACCATCATGN CCAGCTAATT TTT

SEO ID NO:1561: (Length of Sequence = 313 Nucleotides)

CCCCCTCCAC CGCAGTCTGT GCCCCCGTCC CCACCACCAC CTTCCCCAAC CACTTACAAC TGCCCCAAGT CCCCAACTCC
AAGAGTCTAC GGGACGATTA AGCCTGCGTT CAATCAGAAT TCTGCCGNCA AGGTGTCCCC CGCCACCAGG TCCGACACCG
TGGCCACCAT GATGAGGGA AAGGGGATGT ACTTCAGGAG AGAGCTGGAC CGCTACTCCT TGGACTCTGA AGANCTCTAC
AGTCGGAATT NCGGCCCGAA GNCAACTTTC GNAACAAGAG AGGGCAGATG NCAGAAAACC CATACTCAGA GGT

SEO ID NO:1562: (Length of Sequence = 320 Nucleotides)

AAACGGGCCG CGAACCGCAG TATCATGCTG GCCAAGAAGA TCATCATTAA GGACGGAGGC ACGCCTCAAG GAATAGGTTC
TCCTAGTGTC TATCACGCAG TTATCGTCAT CTTTTTGGAG TTTTTTGCTT GGGGACTATT GACAGCACCC ACCTTGGTGG
TATTACATGA AACCTTTCCT AAACATACAG TGTGTAACAG TTCTAATACA GCAAATTTAA TACAATTTTT TATTAGATCA
AAATTCAATA GAATGTTCA TATGTTTTAA GGAAGGTTCA TTGAATTTCT TCTTTTCAAT GGAAGTCTTC ATTTGGAAAA

SEQ ID NO:1563: (Length of Sequence = 299 Nucleotides)

GCACAAGCAT GACCTGAACC TGTCACCTGC CCGINAGIAT TICACATITC TATAGITITIT TGTGATTCTG CCTGCATITA
ATCATCATCA CCAACAAAAA TAGITCCTCT GAAGAATTAT TITATACTAG GATTCTCAAG NTATCTCCTC TCAATCTCTA
TTGGGATCAC TCCACTCTGA CTTGTACACT CATTTTCCCA CTGATGTAGC TGTTCTCAAG TTAGAAGTTA AGTTCTCAGT
CTTCATTTTA TCAGTCATCT CAGCAGCATT CATTATGGTT CAGGCACTCC CTCCTATTT

SEQ ID NO:1564: (Length of Sequence = 325 Nucleotides)

CAGATGGNIC AGTICATACT CIGGCAGTTA ATTITATTIC CTCTAAATAA AAATGGACAG GITAATTIAT TAAGCAGCIG
TGITATCAAT ATGGTACGIG TGIGINCTIG TATAGATAGA TGIATATGTA CATACATAAC TATACATTIT NCIGGACACA
TAATATTINA GGIGCCIATT GIATGCTAGA CACIGITCTA CCATCAGTAA AAAAGCACTG CCCTGTTTTA CTGTTGATTA
AAAACAAAAT TCTGAAAATA GIGANCAATG AGGCTTACAA CATTIGTTAC AGGNTAAGGN ATCTCAATTT AGGAAAATGT
TGTCA

SEO ID NO:1565: (Length of Sequence = 382 Nucleotides)

TTTTTTTTA TATTAGIGCC TGCTTTTAA AAGITTATT TACATTTAA ATACAGIATT TTTCTCATAA AAAAAAAATC CAGGAAGIGC CTAACICCAT GGITTCTATA CCATATGIAC ATGAAAGCTG ACAGAGAGCC TGACAAATGT TCTGGATGIA ACAGITATGAA CACCTATGAG CTGGGACTAC TTCTGANTCA AAATTAAAAA ACACAAATTA AGCACTGCTT AAGAAAAAAA AAATCCAGIT TCTGAACAAC CAAAAGAGAA CAGGGTTAGA TATGTACAAA ACCAGGTATT AAAAANCAGN AAGGAATACA GCACACAAAA ACTCAAACAN CCCATATGIA GTGAACTGTA TATACTGCAG TTAATGAAAA CC

SEO ID NO:1566: (Length of Sequence = 305 Nucleotides)

GCACTGTGGC TAATTGTAGC TCAAAAGATC TGCAGAGCTC CCAGGGCGGA CAGCAGCCTC GGGTGCAATC CTGGAGCCCC CCAGTGAGGG GTATACCTCA NITACCATGT GCCAAAGCAT TATACAACTA TGAAGGAAAA GAGCCTGGAG ACCTTAAATT CAGCAAAGGT GACATCATCA TITTNCGAAG ACAAGTGGAT GAAAATTGGT ACCATGGGGA AGTCAATGGA ATCCATGGCT TTTTTCCCCCA CCAACTTTGT GCAGATTATT AAACCGTTAC CTCAGCCCCC ANCTCAGTGC AAAGC

## SEQ ID NO:1567: (Length of Sequence = 292 Nucleotides)

GATTICCCIG GGGAAGACAA CATCACCAGC AAATGGATGA TIGICAACIG GGGAGCCATT GACTCICCAC TIGATIGIGG GITGAGGITC INCITCAGCC TCACATAACA AGATGCCATT GCTTCCGGIG CTATACACAG CACTCIGAGG CITCTITGIC CAGGGAGGAG GCTCTTCTAC TATAACGIGA AAATCGIGAG TGGCTGITCC CAAGAAATIG CIGGCTGIGC AGCGATAATT TCCTTTGICC TGGTAGGAGA CAINCICTAT CITCAAAGIC TTGCCATAAT IT

#### SEO ID NO:1568: (Length of Sequence = 204 Nucleotides)

ACCTACTCAG GAGGCTGAGG CAGGAGAATA GCTTGAACCC AGGAAGCGGA GGITGCAGTG AGCCGAGGTC ATGCCACTGC ACTCCAGCAT GGGCAATAGA GCGNGACTCT NTCCCCCCGG AAAAAAAGAA CAAGGGCTAA NTTCAAATCA AATTTTCCCT GTACCCTAAG AANAATAATT AGGNCGGGAG ATGTTTGACT AAGT

## SEO ID NO:1569: (Length of Sequence = 362 Nucleotides)

CACAAAGCCA AGTACAGAAC CACAGAATGA AGCCGTCACA AATGTTGAAT CCCAAAACAC TAACAGGAAC AACTCGTATT
TCCATTAATC AAGATTTTAG TATACCAAAT TITCTAGTTT TTATCTCATG GAAATATAAG GGTATTTTAT CTTTTGTATG
CTACTGAAGG GAAACATCA TCATACAGCA ATGAATACTT CAAGGGNCTT GTTGATCTCT CTATTATTGA CAGTGGGGTG
TTAAAGTCTC CCACTATTAT TGTGTGGGNG GCTACANCNC TTTGTAGGGC TCTAAGAAGG TGTTTTATGA ATCTGGGGGC
TCCTCTTTGG GAGCATATAT AATTTAGGGT AGTTAGTTCT CC

# SEO ID NO:1570: (Length of Sequence = 262 Nucleotides)

TGCTAAATGA TAGANGACAG ATTCAAAGIT GTAGITACTG CGTAACTITA TITATGAGGC ATTITAGAAT AGGCAAAACT GATCINITGT GGTAGAAGTA AGAGTGGGG TACCCTCTGG AGGAAGAGAA TITNCTTTGA AGTGGCATGA GAGGATTTTT TIGGCTAATG AAATTATTIT NATATCTGAG TAGGGTTGTG GGTTACACAG TITAGGCATT TNTCAAAACT CATGGNACCA TTCATCCAAG TCCTGTGCAT TT

## SEO ID NO:1571: (Length of Sequence = 402 Nucleotides)

TECTAAATGA TAGAAGACAG ATTCAAAGIT GIAGTTACTG CGTAACTTTA TITATGAGGC ATTTTAGAAT AGGCAAAACT
GATCTGITGT GGTAGAAGIA AGAAGTGGGG TACCCNCTGG AGGAAGAGAA TITNCTTTGA AGTGGCATGA GAGGATTTGI
TTGGCTAATG AAATTATTTT TATATCTGAG TAGGGITGTG GGTTACACAG TITAGGCATT TGTCAAAACT CATGGAACCA
TTCATCCAAG TCCTGTGCAT TITACTGTGT GAAAATTATA TCTCGACTTT TTTCAAAAAA GGAAAAAATA CTTAATTATA
ATATAGCATT TATGNATTAA AATAATCCCN TTATGTAAAAA ATATTTTATT GGNTTGGTCA AGATTCATGA TTGCAAACCA
CC

## SEO ID NO:1572: (Length of Sequence = 417 Nucleotides)

CTACCAGCCC GTTTCACAA CTAGCAGCAA ATCCTGAAGC ATCCTTGGCC AACCGCAACA GCATGGTGAG CAGAGGCATG
ACAGGAAACA TAGGAGGACA GTTTGGCACT GGAATCAATC CTCAGATGCA GCAGAATGIN TTCCAGTATC CAGGAGCAGG
AATGGTTCCC CAAGGTGAGG CCAACTTTGC TCCATCTCTA AGCCCTGGGA GCTCCATGGT GCCGATGCCA ATCCCTCCTC
CTCAGAGTTC TCTTCTCCAG CAAACTCCAC CTGCCTCCGG GGTATCAGTC ACCAGACATG AAGGCCTGGC AGCAAGGAGC

GATAGGAAAC AACAATGTGT TCAGTCAAGC TGTCCAGAAC CAGNCCACGG CTGCACAGCC AGGNGTATAC AACAACATGA GCATCACCGT TTTCCAT

SEO ID NO:1573: (Length of Sequence = 368 Nucleotides)

CAAATAAGIT AGAAACATGA AAAATTCITA GAACITTAGA TGAAAAATTA AATTTACTAC TAATACCCAC CTGCAATAAT
TTCCCGTAGI TIGGGATCIA GGITTACAGI GCATGGCAAA AAGACITTIA CATCTCGAGC CACAAGAACI GGGGTCCTIG
AAGACAAAAA CACTTCAAAA TITCTTATAT CTCCATCAAT TTCAAGAAGI GGCTCAACAT CCTTAGITGI TGGAATATTC
TTTGATATTC TITCGIAGAT GGITTTTAAT GTCATTTGAT CTGGAATACC TTCAGICTCT TCCAAATATA ATATGAGACA
TGAAGTCCGG TATGGCCACT GCTCAGTAAG GITGATCCCG CTAGCAAG

SEQ ID NO:1574: (Length of Sequence = 397 Nucleotides)

AATTITAAGC AAATGITATG TITAAAGACT GITITGATGA AAACTITIAG AATTGAGITA GIAGCAGAAT ACATAGCTAA
ATGIACITIN CTACAAATAG AATGAGATAT TIGATITAAA ATATINCITI CCTCTIGAAA TAGGATGITA GATAGGGACA
TCTCATITIA CCTATCAAGT TCTGAGICTI GCTITAGAAC TACITCTITT AACTTAATIN CATGCATACCA CTGGAAGACA
ATAATATGGC TITITAAACG CATTATCTIT AGTIGAAACT GATGGAGAAA CAAAAATACT GCTTATACCA TATTGGGIAC
ATGCTGAATG TITITAAAGA CTAGCCAAAA CTGACATTIT TTAAAATTAA ATAAGATGIT TTAGTTTCAA ATTAGAG

SEQ ID NO:1575: (Length of Sequence = 296 Nucleotides)

GGACTCAGCC TICCGCGGCA TCTGCATGAT GATCGGTGTC AACCCGGGGG GCGTTGTGCA GGTTGGGGCA GCTGGGCTCT
NAGGGCAGGC GCGGCCNCTG GGCTCGGGCG GCCCCTCACC TGGGATCCGT CACGTTTCAG GACTTTATTT TCTTCTTCAA
TGNYTGTAGCC TCCTGGGTGA GCCCGAAGAT NACCTTCGGG ACATGTTTA TAAGGTGAGG CTCTGTCTGG GCCCTGATCT
AGTTCCGGGA GCAGGCAGGA NGTGAGACCA TCTGGTAACA ATNGGGGCTN GGGATT

SEO ID NO:1576: (Length of Sequence = 289 Nucleotides)

CTITATGAAG TAGTAATICC TGAGAGGTGT GCTGGCTGAA AACATAATAG GTTCTGGAAG AGCCAGGTAA ATGCCTGGNT
TTAGACATGC AGGGGTTAAT CAAAATAATT TAGGAGCGTT TTCAGCTGGT GAGCCTCATA TGGGATCTTC GAACCCGTGG
CGAGAAGAAA ACCGGTGTTT AGGNAGCACC AGGCACAGTG CTCGGAAGGG AGAGGCTNGC CGGCCAGTGT GCAGCTCAGC
TNTTTCGAGG ACCGAACCCG CAGCCINGCT GTNTCCCAGC AGACCCAGG

SEQ ID NO:1577: (Length of Sequence = 320 Nucleotides)

CAGACTCTAC TCAGATTTCC CGCCTATGCC CCTAGGACAG AGCTGGAAGG GAAGGAGGCT GGGCCTATTT AGTCATAATG
CCTCCCCACC AGGTCTAGCT TTCATTCATC CATGAACCCT CACCCAAGGG CCAAGAACTG AGTTCACTGC ACCCTGGACC
CCTGTTGAGG TAGGAGAAGT AGACGTTGGG AGCAAGGTTC CTCTCCTAAT TTTNTTGCAT CCCCTCAGTG CCCAGCACAG
CCTCCGGATAC AGGGCAGGTT CACAGTCAGC GTGTTCACCT GGGNCTGTGT ATGCACCTAA GGAAAAGNCT CAATTTTCCT

SEQ ID NO:1578: (Length of Sequence = 217 Nucleotides)

AATCAGGAGA ACTGITAGAG CCATACCAGA GAAAATCACA AGAAAGGCAG GACTGCAAAG NICIAGTGGA GGCTGTGAGA AAAGGTAAAC CCCTTCITAA GCTCATCTGC CCCTTTAGTT ACCACTGGCT GTCTCACTCC TGGATTTATG TGACTCCCTT AGCTATACTT TCCCANCCCC CTGGGATGTT CCCCACTCAT CCTATTCACT CACAAAG

SEQ ID NO:1579: (Length of Sequence = 375 Nucleotides)

TIGGICCICA AGICCIATIT TAAAATITIG TCAATTAGAG GACICTIGGI TCICITGGIT GACICATICI CIGCIGATIT
GITCICIGIA CITGCAGCAA ATAAAGIGCA GICATTGAGA ATGINCCIGI GICACIGIGA TGIATCAAGG GATCITCATG
TTAATATCIG TITCICIGAC AACIGIGITI TATACTITGI ACIGIAGCIT TCATTGGAGA AGCCCTGGGC TCATAAGAGI
GATTIGITGI GGCATTICCT TATGGAACAT AAGCTITIGA AATATACTITG AGGTAAATAT TCATGGGAGA CATCCAAATG
CAGTAATGAG AGIACAATGA AGACAGCATI TINGACTITG GAAACCTGAG TICAA

# SEO ID NO:1580: (Length of Sequence = 325 Nucleotides)

TCINCIGATG CACCCATGAG AGGGGAGACA GCACTGICGI CICTCGCAGI TITCCCITAA CACTCCCTTA TCIGCAGACT TAAACTAGGA GCCCCTGGCA GAGTCCTACC TCCAGAATCA CAAAAGTGTA GAAGGAAAGT GAGAGACATT GATTGACTTT ATATCTGACT TACTAGTITC CTAAGGCAGA GATTTTTTAG AAAACTGCCT GGCCTGGCCC AGCCCAGGAT AGATAGGGAT GGGGTAAGAAG CCCTINAGAA TGTGGCAGTA TGTGGCTTNG ACTTCAGACT TGTCAGATTA GGGGTTTTAT AGGGGTTTTT TTAGC

# SEO ID NO:1581: (Length of Sequence = 402 Nucleotides)

GCAGATCAAG AAAAAGITTC AGCCAATGAA CAAGATCGAG AGGAGCATAC TACATGATGT GGTGGAAGTG GCTGGCCTGA
CATCCTTCTC CTTTGGGGAA GATGATGACT GTCGCTATGT CATGATCTTC AAAAAGGAGT TTGCACCCTC AGATGAAGAG
CTAGACTCTT ACCGTCGTGG AGAGGAATGG GACCCCCAGA AGGCTGAGGA GAAGCCGAAG TTGAAAAGGAG CTGGCCCAGA
GGCAAGAGGA GGAGGCAGCC CAGCAGGGC CTGTGGTGGT GAGCCCTGCC AGCGACTACA AGGACAAGTA CAGCCACCTC
ATCGGCAAGG GAGCAGCCAA AGACGGAGAC CACATTCTAC AAGGCCAATA AAGACCTACG GCTTTTTTCC CNTGGCCAAT
AA

# SEO ID NO:1582: (Length of Sequence = 286 Nucleotides)

TCTTAGTIGA TIAAAACAAA TAATIGAAAT AAAAAATTAT GITTATNCTI ACATGTATGC CATGTAGCAC TITAAGGAGA
TGAGTITATG AAATTCATGA ATGAGAGGAT GATGTAAGTI TAAAAATCAT TATTITAGTI GCTITATTCT NCTATTITAA
ATTCATAAAT AACACAGGIG GCCTGTATTI TGAAAAGAGC CCTTTCCTCC ATTTGANCTI TATAAACACT GAGGCAGTAG
GTGTAAAATA TTATCTCCAC TTTATATTTG AAGGAAATGG GGGCCA

# SEO ID NO:1583: (Length of Sequence = 323 Nucleotides)

CTAATTITIG TATTITIAGT AGAGATGGGG TITCACCATG TIGGCCAGAC TGGTCTCAAA CTCCTGACCT CAGGTGATCC
GCCTGCCTTG GCCTCCCAAA GTGCCAGGNI TATAGGCATG AGCCACCACG CCTGGCCTTC CAGTTGTGAC CTTGTTAGGA
TACTGCTTTA ATTCATTITC CCATTGAAAA TAAGCATGAA AATAACTGTG CAGTCATAAT TGTGGTATIT NCTGTNAAGG
AAAGTGGCAG GCCTCTGAGT GTTTATCGGG AGACCTAACC CAGTNTCAGA GGGGAAGTCA GAAGGCTTAC TNCCCAATGG
GGG

# SEO ID NO:1584: (Length of Sequence = 301 Nucleotides)

AAATACTIGI AAATCACTIT AIGITICIGA GTAAGGAAGI AATGAAACAT ACGTACAAGI AATCAGTAAG ACTIGITAGA CAGCTGITGT TCAGGATGCC TITTAAAAGGG CIGGTAATGC AGTTACATIC TAACAGAGAA GTCCAAACTA CAGGTAAAAA CTACGGCTIG TACTGIGAAA AATGTGCAGC TITTCAGITA TAAAACTAGI TGAACACTGG TITTACAAGGI AATCCGTAGG AACAGAGAGA CTGTAGGAAA ATATTCCAGC ACTTTGAGIT GTGTTTTGGC AGCAGCATTT G

SEO ID NO:1585: (Length of Sequence = 328 Nucleotides)

AAATACTGAT TICAGACCTT CITGCTCTAG AAGICAAAAT ACTITCCCCC TGACAAGAG TAAGATAAGG TAGAAAATAG
AAACACTGGA AGAGAGATCT GGACTCCTAA AGCTGTGATG CCATAGTGTA GTGGGGGGGG GTGCGTGAGG AAGICAGGAA
TGCCGCAATG TTAAAGGGAA AGGGAAGATG GAGCAAAGTG AGTCCCAGGG CCAGCAGGGG GCCAGCCTIN TITGACAGGG
GCAGGGGAGA AAAGGCCAGA CITCCCATAC ACATGCTAGA GGGGAGGGCT AGTGTTGAAG GGTAATAAGT TGAAGGAGTC
CACGGGCT

SEQ ID NO:1586: (Length of Sequence = 256 Nucleotides)

GGACTATCTG TATGGCAGAC TCATCAACTT TGAGAAGAGG AGGAAGGAGT TCGAGGTGAT CGCCCAGATC AAGCTGCTGC
AGTCGGCCTG CAACAACTAC AGCATTGCGC CAGATGAGCA ATTTGGGGCC TGGTTCCGGG CCGTGGAGCG CTCAGGGAGA
CTNAGAGCTA CAACCTGTCG TGCGAGCTGG AGCCCCCATC CGAGTCAGCC AGCAACACCC TCAGGACCAA GAAGAACACA
GCCATTNYCA AGCGCT

SEQ ID NO:1587: (Length of Sequence = 371 Nucleotides)

GGATTCTACA GGCATAGACT TACACGAGTT TCTGATTAAC ACATTAAAGA ATAATTCCAG GGACAGGATG ATACTTTTGA
AAATGGAGCA GGAAATTATT GATTTCATTG CTGACAACAA TAATCATTAT AAAAAGTTCC CTCAGATGTC ATCGTATCAG
AGGATGCTTG TCCATCGAGT GGCAGCTTAT TTTGGATTGG TTCACAATGT GGATCAAACA GGNAAATCTG TTATCATCAA
CAAGNCCAGC AGCACCAGAA INITACCAGC CAGTCTTGTC TNGTCAACAG GGGNTTCCAA GGGCTAATAG GAGTNCAGCA
GCCCACCTCA GAGTCAGACG TGGTTAAATN ACCCCCAAGG GACTCCGGTG C

SEO ID NO:1588: (Length of Sequence = 314 Nucleotides)

CACACAGGAT TOCATAATAC TOCTGCTGTG TTCTGAATAT TTGTACTTCA CATGGGATTA CTGAACACTA CTACGAGATT
CTGAATGTTT GINGCTCACA TAGGATTCCA AAATGCCCCT GCTGTGTTCT GTTTGTCCCT CACATAGGGT CACTGCTGCT
GGGTTCTCAG TGTTTCTCAC TCACATAGAA TTCCACNACA CTGCGAAGAA TTTCTGAATG GTTTTCTGTA ACATAGTATT
CCAGCACACT CTCGCTGTTG TTTGAATGTT TGTCCCTCAC ATAGGATTCC AGAACACTTC TGCTGATGTC TTGA

SEQ ID NO:1589: (Length of Sequence = 256 Nucleotides)

GACGAGGCAC CATGCGTGAN ATCGTGCACA TCCAGGRGG CCANTNCGGC AACCAGATCG GNGCCAAGTT TTGGGAGGTC ATCAGTGATG AGCATGGGAT TGACCCCACT GGCAGTTACC ATGGAGACAG TGATTTGCAG CTNGAGAGAN TCAATGTTTA CTACAATGAA GCCACTGGTA ACAAATATGT TCCTCGGGCC ATCCTCGTGG ATCTGGAGCC AGGCACGATG GATTCNGTTA GGTCTNGACC ATTCGG

SEQ ID NO:1590: (Length of Sequence = 313 Nucleotides)

GGCAACAAGC CAAGTAGCAA AGATATAAGC AACAATCAAA TGGAGCCTGA AATATGATAA GAGCATACAT GCACTTTAAC
AATAATTTIG ATACTGGAAT GATTATTTCA GAAGCAATAT TITTINCTGAA AAGCATTGGT CITCTGTACA GAAAAATAAA
AAAGTGAGCT GCCACTCATA GTGAATTAAG AGCTGTGGGC TGAAAGGGTC TCTTTTATAG CCAGTTTGAA ATTTTTCATA
TAATAAAAAC AGTATGTAAA TATTATATAT ATATACACAC ATACATATAT ATGCATATAT GTACATATTT CTG

SEQ ID NO:1591: (Length of Sequence = 296 Nucleotides)

TITINAGICTO OGGOCTOACA ATTOAGOGAC TGCAGCTOGG CCAAGGCCAG GGGAGACCTG GGTGCCTTCA GCAAAGGTCA
GATGCAGAAG CCATTIGAAG ACCCCTGGTT TGCGCGGGG ACGGGGGAGA TGAGCGGGAC AGTGTTCAGG GATTCCGGCA
TCCACGTCAT TGTCCGCACG GAGTAGGATT NGGGGCCCAG GCCTGGCCTC GGGGTTCCCC CGCTGCCTGC TGGCCAGTGG
CNGAACCCCC CANINCCTGC CACINTCACA CAGTATTTAT TGTTACCAAA ATGGCT

SEQ ID NO:1592: (Length of Sequence = 299 Nucleotides)

GGAATTCCCA AATTATGGT AGTCCAAAAG CCAAAGGCAA TGTGAGGAAG GACACTCCCC AGATAAGAAC AAAAACAGAA
ATCTGTATGT NCTATGTGTT ACACACAGTT GCGAATAATC AGATGTACAC ACATGATGCA AAGGCACGCC GCTACACATT
TATGTGATAT TCAGACATAT GTTCAAATAG AGGAGGTGAA TATCTTTTTA TAAATACAAT TTAGCAAGTA CAAGAATGCT
GATCAGCTGC AGCTCAAGAG GAAAGGGGG AAAAAATCTT ATGGGAAATT ATTAATACT

SEO ID NO:1593: (Length of Sequence = 378 Nucleotides)

CCAGITIGGI GATICINITC IGIGICIGCI GATCIATIGG CGIGAGAAGC TGAAAGIGAC CAGCCAACAG CCATAACITI
ATGITIAGIG AGACICATAA IGGGICICCI GCIGGAAGAT CICCCCICTA AGANICAGIA ATTCIAGACC IGCAAAGITI
GAAGITGIAA GCATGGGAAA CACAAATICC CCAAATAGGI CCAGATAGIG ATAGAGAATA AGACACITAC ITGCCTACIT
CCATITCICA GCCCAGATAT ICTACCIATA GIGGACATGC CCATGCAATG GGCTATIGGG TITGAGGTAT ACATTGCACG
GIIGAAGGAC AGIGCCICAT CCIIGCAGGG GIGCCCITIN CCAGITGGCA CCACAGCT

SEO ID NO:1594: (Length of Sequence = 353 Nucleotides)

ATTITINGG GGGAGGIGTA TGTAGATGAG AGTCTATGAT ATAAAGCAGT AAAAAAAATG CTGTTGTATA GGGATGCAAT
ATTITIGGTG TAAGGAAGAG GTTTAATTC ATAAAATAGA AAACAGGTTG GAGAAGTCTT TAGGAAAGGG ATACCTTTTG
GGTTGGCTTT TGAAGGAGAA GTTTATACCC AGGTTCAAGC TGAAGGGCTA AGTGAGTAAC TGAAAGGGCT GAGCTATTTG
GATTACCATG AGGAATTTGT GATGGCTGGG AATGTAGGGT GTGTGACCAG ATGTGGAATC ACAGAGGGAG CCCACAGAGG
AGCTTCGGCA CATAANCTAA AGAGTTTAAT TTT

SEO ID NO:1595: (Length of Sequence = 343 Nucleotides)

CAATATATTA AATCTATTT GTAGCTOGAC TICACTTACA ATGTAACAGA ACATTGAATA TIAGATTCTG AGCATATTCA
TGCAAACTTC CACTTGGTG AAAGTGATGA CAGTGGAGTT CTGGAAGACA ATTTTCCTTG TAAACACCAA GTTTTGCACT
TTGGACTATG CTCTCAAGAT AGAAACTTAC GTGAGTGGAA AAAGAAAATG TATAAATGTG AACAAATATT CCTTACCACA
CAGAATAACC CTGGCAACAA ACAATATCCC CAAGTCCTGG GTNATTCAAT CCTCACCGTG GGCAGGAAGG GTGAAGGAGG
CTGCACCTGG GNCACAGCCT TTT

SEQ ID NO:1596: (Length of Sequence = 373 Nucleotides)

TAGICAGITA TIGCIGCACI AGAGCIAAAT AAAAGACATA AATATCIAAG GCACITACTG GAATAAACAT CITATITCCG CIAAGAGGIT GGCTAGGGAA GCTCIGCTIC AGAGTATGGG TIGAGTATAA GCCTGINCCA CATGICITIT GCTCTGGGAC CAGGAGTITGT GCAGCCCATC CTITTCTCAA GACAAAAGCT GAGCCAAGCA AGGACATTTA AAGCTICACT TCTGCTCACA TCATATCTAT TGGNCAAACA TICCATTGGG CCAAAGCAAA TCACATGGGC CAAGTCAAGC ATCAGTAGGT CTGGGGGAAT ATTCTTTCCT CTACTCTGG ACACATGGGA AAGGGTTATG CATACTAATT CTT

SEQ ID NO:1597: (Length of Sequence = 276 Nucleotides)

GATIGICCAT ACTIGATTAT TAGTITICIAA AGAAAGTATI CITAATTCCA AGCCTAATAG CTCTTATGTC ATTAGTITCT AGGGCCAGAGA AATGTACTTG ATGAATTITI GTTGACTTIT TTTTTTTGCTA GCCAATATGA AGGITGCCAG TCCCTGCCAA AATCAGCACT AAAACTATTT TNCATGAGTA ATAACAATAA TATTCTTTTT TAAATAGCAC CTTTAACCCA AAAATCTTAA GCCTATATAA ACATTCACTC AACANTACAC TCAAAA

SEO ID NO:1598: (Length of Sequence = 355 Nucleotides)

TGTATIGCTA ACTGTCTTIG TAACTAATIT ATGTATACNC TAAATGGTAT AGCATGTGAT TITATTATAG TIGATTAACT
TTGTAATINC TGTAACTGCA TCGATATCCC AGTCTACCTG GAAAATTAAG TCTATTAACC ATAGTTGCTG TGGGAGACAG
TACTATTGCC AACTGAAGCC TGAATCCTTC ATTTATTTTG TCCCCAGTTA CAGAGTGGAG GTTTAGAGGA GTGGGGTTAG
ATAATGCTCA GATTAGAAAT ACAAAGGCAG CTGTCAGATC CTCCCATTTT ATTTGTTTGA AGGAACTGAG GTTGGTAAAC
ATCACAAGNG CTAGTTAACT GGTGAGTAGC AGCCC

SEO ID NO:1599: (Length of Sequence = 313 Nucleotides)

GGAGGIGAAG GACACAGIOG AIGGGCAGAG GNICCIGGAG AAGAAGGGCA GINCIGCNCI CAAGGACCTC AAGCGGCCANI GCATTIGGAG CGGAAACGGG CAGATAAGCI GCAGGAGCGA CINCAGGACA TCCTCACIAA CAGCAAGAGC CGCTCAGGCC TINAGGAGCI GGITCICTCA GAGATGAACI CACCAAGCCG GACCCAGACA GGGGACAGCA GIAGCATCIC CTCCTTCAGC TACCGGGAGA TCTITCGGGA AAAGGAGGAG CITCGGCTIG TTCCAGCCAG GICCTIATCC AGCAGNCCIN AAG

SEQ ID NO:1600: (Length of Sequence = 277 Nucleotides)

AGITCACAGA ACTOCAATIC TITATIAATO ACAGCITGOT CACAATGACA TACAGGAAAA TAGCACTAAT GAAGAGTAAA TATGCAGGCA GCAACCITCA GGAGITGGGA GITGGGGGAGA AACGACITCA AAACTGCGAT AGGTACTTAT GGTGGGTATC TGGTGGATCT TAGTTGGCCAC AAATGCCCTG CCTAGCCCCC TTAACTGCGT CANITTCACA GATGGAGTGT TTTGTTGTTG GTGTTGTTAG TAGGCAGGAT TGCCTTACAC TGGGGGA

SEQ ID NO:1601: (Length of Sequence = 228 Nucleotides)

TTGAGACCAT CCAGGCTAAC ACGGTGAAAC CCCGTCTCTA CTAAAAATCC AAAAAAAAA AAAAAAAATT AGCCGGGGGT GGTGGCTTGC GCCTGAAGTC CCAGCCACTA AGGAGGCTGA GGCAGGAGAA TGGCATGAAC CTGGGAGGCG GAGTTGCAGT GAGCCGAGAT CGCGCCACTG CACTCCAGCC TCGGCGACAA AGCAAGACTC TGTCTCAAAA AAAAAAAA

SEQ ID NO:1602: (Length of Sequence = 299 Nucleotides)

GGAAGTCCTT TCTAATGAAG AGGGGAGATG TTATCGATTA TNCATCATCA GGGGTTTCCA CCAACGATGC TTCCCCCCTG
GTTCCTATCA CTGAAGAAGA TGAAAAATCA GATCAGTCAG GCAGTAAGCT TCTCCCAGGC AAGAAATCTT CCGAAAGGTC
AAGCCTCTTC CAGACAGATT TGAAGCTTAA GGGAAGTGGG CTGCGCTATC AAAAACTCCC AAGTGACGAG GATGAATCTG
GCACAGAAGA ATCAGATAAC ACTCCACTGC TCAAAGGATG ACAAAGACAG NAAAGCCGA

SEO ID NO:1603: (Length of Sequence = 263 Nucleotides)

AAGGCAAGAA ATTAGCCTTG TTAAGAATTT TAAGTGTAAT GGGAAGCCAT TAGAGGGTTT TAAACAAGGA AAGATGTGAT GTGACTTATA TTCTAATAGG ATTGCCTTGA TTCACCTATG GAGAATGGAT TNNIGGGATC TCAGTACTGG GATACTGAGA TCCCAGGGGG AAAATATCAC TAAGGTTGGA ATTGCTTTTC TGCACATTAA AAGCAATTCN CTTTTTCCTT GAAACCTCCA TGTGATGTTA ATTAGGGTÄA ATG

SEO ID NO:1604: (Length of Sequence = 260 Nucleotides)

ATGAGACCT ACGACTIATT TITGTGTTCT GAACATAAGT NCTTTGTCAC ATAAAATGTG CTATGAATGT TGAGTTTTAA
ATACTCGAGC GGTGACTCAC GCCTGTAATC CCAGCACTTC GGGAGGCCAA GGCGGGCGGT TCACCTGAGG TCAGGAGTTC
GAAACCAGTC TGGCAAACAT GGTGAAAACC CCGTCTCTAC TAAAAATACA AAAGTAGCGG GGTGTCGTGG CGTATGCTGG
TAATCCTAGG GTTCCTGTCA

SEO ID NO:1605: (Length of Sequence = 290 Nucleotides)

GACAGACATT CAAACCATGG CAGGIGGCAA GAAGTATCAA ACTACTAGAT CCITGGGATT GINCITIGIA CTGGGGIGTA
TITTINCCAA CAATCCTAAA AATCATATGA ATAGAGATAG CAATATATAT CINACCCATT TGGAAATGCA CAGAGATICA
GGAGIGITCA CATAGAAACA GAAGATCATT GGCTTTTGTC CATTCCCAAC GCCAGNAATC TGTTTTCCTT GACTCTTTTT
GATCTGTGTT TCTGAATGIN TIGATATACT GCGCCTACTG GGTGTGCAGG

### SEO ID NO:1606: (Length of Sequence = 290 Nucleotides)

CTCACTIGGG TACTACAGIG TEGAAGCTGA GIGCATATGG TATATITNAT TCATTITTGI AAAGCGITCT GITTIGIGIT
TACTAATIGG GATGICATAG TACTIGGCTG CCGGGITTGI TIGITTITIGG GGAAATTITG AAAAGTGGAG TIGATATTAA
AAATAAATGI GTATGIGIGI ACATATATAT ACACACACAT ACACATATAT TATGCATGIG GIGAAAAGAA TIGGCTAGAT
AGGGGATTIT CCTGAACACT GCAAAAATAG AACGTAGCAA AATGGCTTCA

# SEQ ID NO:1607: (Length of Sequence = 365 Nucleotides)

GCTCCACTGA CCAGCTGITC CCTGTCTCTC CTTCTCCTTG AGCCTCCTC TTCCCTGAGA CACAATAATA TTAAAATTTG
GCCAATCAAT AACTCAACAA TGGTGTCTAA TAATTGTTCA GGTGCGAGGA AGAGGCATAC ATCTCTCACT TTAAATCAAA
AGCTAGAAAT GATTAAGCTT AGTGAGGAAG GCATGTCAAA AGCCGAGACA GACCAAAAGC TAGGCCTTTT GTGCCAGTTA
GCTAAGATGT GACTATAAAG AAAAGCTGTC GAGGGAAATT TAGAATGGTA CTCCAGGGGA ACACACAATG ATAAGGAAGC
AAACAGCCTT ACTACTNGGA TATGGGGAAA AGTTTTCAGC TTTGG

# SEQ ID NO:1608: (Length of Sequence = 294 Nucleotides)

CTCAGGAAGC CTCTCTTCT TCACTTACCA TTACTAACTC TCCAAGCATA GAAATCCCTG GGAATTGCGA GAATAACTCC CACTATTTTA AAATTTATAT TCAGATTTGT TTCGTTTCAT AAGACACATC AAACAGGCCT ATACAAAAGG TTTAGGAAAA GAAAACAATG GTGAGTCCCG GCCCTCTTCG AATTCACTGG CACCTCATGC AAGTNTAGGA AGGCACGCTG GATCGTCTAT CTGATTCCAA AGCTGTCCTT TGCCATCTCA TCCCTTGGNC TGCCCCCCAA CCCT

## SEQ ID NO:1609: (Length of Sequence = 393 Nucleotides)

CAAAAGCTAA CTCTTAATAA GAAGATGAGG AAATAAAATC AGTTCAAAAG GGAGGAATAT GCATTCCCAG AATTAAAGGA
CCCCGGGTCC AGTTTGAGGA GGACTCTTGG CCAGATACAA GCCCCTTGTA TAATNCTCAA GAGGGAGGAG ACCTTATTIN
CTCCTTNGAG GTGTCTAGTA TGAAANCTGC TTATTTTGAA ATGTGATTCT AGCCATTATC AGGNGCAACT GCAGATAATT
CCCATTTACA GAGGAATGCT GCTAACAGGT GTGGGNGGGA GCAGCGACAN CGNAAAATTC TGCTGTCATA GGTCACGTTT
ATGTTGGTTT TCTTTGAAAA TCAAGGGTA GAAAATTTCA TGCCTCTAGA GGAGAGAGA GAAACACATG AGG

### SEQ ID NO:1610: (Length of Sequence = 464 Nucleotides)

TGICIGIATI TATTAAATIG CCTTTACTAC TITTAGATGG CCATACGITT TCAAAAGCAA AGACCTAGIA AGCCATITGT GITCATTICC TAAGCTATCT TAGGIACAGG TCCAGATTAT AAATGITACC TGCTAATCAG AGACCAAATT TITAAATTAA TCACITGIAA ATCCACATTA AAAGAAAAAG AAACTTAGAA AAACACATAA ATTTCTTTIG TGATCCCACT ATTCAGGAAA ATCCATTGAA AAAGCAGATG ACTTATCCGT GITAAATTIT TAAAGNCCCT ATTTAAACTG TCATGIAAAT TCTNATTTAT CTAATTTTTT AAAACACATA TAGNNITITA CTCTCCAGTT CCATAANTGN CTCANTTCTG GIGANGGTCA TTACAACAGN CATTACGNGG GCATATCGGN MTAAAANGGC CNIGCGGTCC TGNATCNGAG GNGGGGTTAA GGTC

## SEO ID NO:1611: (Length of Sequence = 465 Nucleotides)

ATAATTTAAA GAAAAGAGAA TICTACAATG TAAAACCCTT TAATATAAGC TGITTTAATA ATTGGAAAAC AGAATGANTA NIGITTTINI TIGICATGCC CAATTATTIC ANCAAGITIT TATTAATAAC TIGCTACATG GTAGGCACAG CTGTAGGIGT TGGAGATATA GAGGTAAACA AGTCTGACAT GATCTATGCT ACCACGGAGT TCTTATTTTC AAAGTGGAAG GTAGAAAATA
AATAAAAATG ANCTAGAAGA GCAAAGTGCC TCTGAATGAG CATGCAGANG CATGTTTTCA AAATGTCTGT GNGTGGGATA
AATAGATCAG CAACACCA GGCCATGCAA TTTNGCAGCA AATCACTTCT GCAGTCTAGC TGCTGTTTTT CCTACTCTGG
AATCATACTC CCCCCTTCGG TCATCTNTGC CAGTTTCNCT GNGCTTCACC CTACCCTCCN TTTTN

SEO ID NO:1612: (Length of Sequence = 458 Nucleotides)

ATGAAATGA ACAAACCTAA AGAGAAATGT TCTTACCGIT CCACAGGAAC CAGCTTCTTC CACTGGGCCA CTAGGTCCCT
GGCAAAGCTT CCAACATGCT CGTGTTTCG CAAGCTATTT ACTGTTTTCC CAACCCCAGT CTCCTAAAAT TTGACAAAGT
AATTGTTAGA GGGGTCTGGA ACTAGGCTAA CGTTTTTCTA AAGAAATAAG GCTTTCTACT TTGAGAAACT CAACAAGCAA
TACTTCCTTC CTACAACATA CCCTGCAAAT CTTAACACTA AATTACTTTG TGTCTATCAC CCAAATCTCT AATGACACAC
AGTAGCAAAG NGTACCAAGT TCAGAACTTT AATAACACAG GTNATTAGGG CAGGTGTTAG GGCACTAGNT AAGAGCTTTG
CATCAGTTCT GGATCAGNCT TTTAAATAAC CCCTTAAGNG GGCANTAGNC CCTTTTTT

SEQ ID NO:1613: (Length of Sequence = 322 Nucleotides)

ATGIGGAGAT TIGITGIGG CIAGGGCAGT CCAGAGGAGA GATATGIGGC AGGACAAGIC TCTACCCIAT ACAAGINCIT
CCGGCAAGCC CTCAGCACAT GACATAGGCC CAGAGAAGGA TGCAAAGAAT TCTGGTCATA AATTGITTTC AAATATCAAA
TAAATCATAT GIGCACATGC ACAAACATGC CTTCACAACT GAGTAAAACC AGACTCACCT TCAAATATAT CAACAGITTT
NTCAAGCGCC GITAAAAAATC AGGCATCGGA CCTCTGGNIN CGAGAGCTGG TTTNATGGGG AAGTTAGATC AACCCGTCAT
CT

SEO ID NO:1614: (Length of Sequence = 280 Nucleotides)

AGIATCAAGG GATAAAATAT ATTITTAATT TIGIATITCA CTIGAAAATT GIAAGGICCA TITIATAATG TATIGCITGC
AAAATAAGIC ATGGAAGCCC TGAAAAATTA GICAATTCAC TAATCAAAGA AACATATATT AAAGACCTAC TATGCATGAG
GCACCATGCT AATTGCITTG AAGAAGACAA AGITGAATTA GACAGGGITC CCGTTTACAA GNIATITACA ATGCAAAGGG
GGATACAAGA CATATAAAAG GCTATGGAAC TGCCCTTCCG

SEO ID NO:1615: (Length of Sequence = 393 Nucleotides)

GOGIGGIGGI GOGIGCOTGI AAATCOCAGO TACTACOGAG TOTGAGGCAG GAAAATCOCT TGAACCAGGG AGTOGGAGGI
TGCAGTGAGC CGAGAGCACG CCACINCACT CCCGCCTAGC GACAGANIGA GACTCCGTCT CAAAACAAAA CAAAACAAAA
CAAAAAAACCA AAAACACTGG GAGTCCCAGT TIGIAGGAAA TCATTAAGAT TITATTATTT GAGCTCCAGA ACGAGTGAGG
ATGACCIGAT AATTTIGGIT TGGCTCAGGT TGIAATGIGI TICTGTTTTG CTCGATGACT ACTAGAACAG TTCTCAAACT
GIGIGGIGGG TAAGAATCAC CTGGGGACTT TGACCAAGIN ACATGTCTAC AACACCCGGC CCCTACAGGC TCT

SEQ ID NO:1616: (Length of Sequence = 353 Nucleotides)

CCACCCCAGC CICCTIGGAG CIATCCCTIT CIATCCCCCI CCATCCAGCC CCIGGCCACC ACCATTATAT CIATTCIGGA
ATTCCCACAG GAAAAGCAGG CACITTATAA ATCAGCGAGG GATTCACGGC GAAATGAGAC TGITCGIGAG TNATGGCGIN
CCGGGITGCT TGCCGGIGCT GGCCGCCGNC GGGAGAGCCC GGGGCAGAGC AGAGGIGCTC ATCAGCACTG TAGGCCCGGA
AGATTGINIG GINCCGTTCC TGACCCGGNC TAAGGICCCT GTCTIGCAGC TGGATAGCGG CANCIANCIN TTCTCCACIA
GTGCAATCIG CCGATATTIT TTTTTTGTTA TCT

SEO ID NO:1617: (Length of Sequence = 227 Nucleotides)

TITCTICCAT GCAACANICI GNAGACITAA GIGGCITICI NCIGIACINC CATAGAACCC ACCCAGIACA TACCICCAGI GNGGCACIGA TITTATGCIA TACATATGAC IGIGIGITCA TCTCCICCAC CAGACIGIGA GICCCATIGG AGIAGGAACT AAATTIINIT CAACACICIG ICITCATCAC CICGIGIAGI ATCITGIACA GAGIAGATAA TGATTAA

# SEO ID NO:1618: (Length of Sequence = 362 Nucleotides)

GGAAGGITIT TAATGCATGA NGTATACTIG INATCCIGGA GGITGGAAAA GATTCAGTAA AGATAAAGIT TGGCAAAAAAT
GATTCICTCC CTAGGATITG GGGATATGIA AATCAAACCA AAGGCACATT CTGCAGCTCA CAGCAACCIT CATITITIGI
CCTAGATTGA GITATCTATC AAGAATCATT CATTCCCTCT CAGCCCTTGC AACTGITTCC TATGACTTTG GACTTGGCCA
TGCAACTTGC TTTGGCCAAT ACAATGIGAG TTAATGIGCT TTAAGTGCAT GTAATTAGGT CAGTCCCTCC CTCCTTGAGC
TTCAACTCTC CACCATGAGG ACAACATTGC CCTCCTTCCT GG

## SEO ID NO:1619: (Length of Sequence = 344 Nucleotides)

GCAACCICAT CCCAGGITCA AGINATICIC CIGCCICANC CICCIGAGIA GCIGGGATTA CIGGCGCACC ACCACACCCG
GCIAATITIG TATTITTAGI AGAGACAGGG TITOGCCATG TIGGCCAGGC TGGICTIGAA CICCIGACCI CAGGIGATCC
ACCCACCICA GCCITOCAAA GIGCIGGGAT TCCAGGCAIG AGCTACIGIN TCGGCCCAAA TCTTICTTAA GITGIGICIG
GCCITIGGCA GAAATAGCCA CAAAGNCAGG GTAGGAACGI TITACTCTIC AAGIGATGAT GGCATCCGAT AANCITITAG
AGGGAGGITT TIAAAATGCA ACGI

# SEO ID NO:1620: (Length of Sequence = 379 Nucleotides)

GOCAGOGGAA GOTOCTCAGG CTCCCACCCT CTACAAGCTC CTTCTGCTCC AGCCACACTC ACCAGGCCCG AGTTCCCACC
TAGCACCTTC CCTGGGAATN ATCTCCCCCT GGTTGGCTCT TTCTACTTAT TCAGCCTCAA ATGTNATCTC CACTGANAGG
CCTTTCCTGA CCTGCTGAGC TTGATTCCCT CCCCTCCCCA GTNACATTAC TCCGTGTTAT GGTTACCCATC CCTGTCTCCT
TAGCTTGTTT TTGTCTGTAT TGGCTCTTCC ACTAGACTGT AAGCTGCATG AGGCCAGGGG ATGTCTGTTT AATNCCAGTT
GCTCAGGATA GTGTATGGCT CGTGATAGAT GCCTAGNACA TTTTAAAATG GGGACGGAT

# SEO ID NO:1621: (Length of Sequence = 283 Nucleotides)

GATTTGGGGG CTCGGGGAGG CAGAGAATCT CTTGGGAGTC TTGGGTGGGG CTGGTGCATT CTGTTTCCTC TTGATCTCAA
AGGACAATGT GGATTTNGGG ACCAAAGGTC AGGGACACAT CCCCTTAGAG GACCTGAGTT TNGGAGAGTG GTGAGTGGAA
GGGAGGAGCA GCAAGAAGGA GCCTGTTTTC ACTCAGCTTA ATTCTCCTTC CCAGATAAGG CAAGCCAGTC ATGGAATCTT
GCTGCAGGAC CTCCCTCTAC TACTTCCTGT CCTAAAAATA GGG

#### SEO ID NO:1622: (Length of Sequence = 356 Nucleotides)

TTAATTITAA AGCAGATAAT ATTICAAATA TITICTITGA AATAGACCAT TIGICCIGCC TIGAAGTATG TTAGIACATT
TTAAGAAAGT CAGIGGGITA AGGAGTCAGT GCIGITAGTA TICATGCITA AAACACTICC CITCTACCTA CCCTAATAAA
TGAGGGGCTC AAGAGAAATA TITCTAATTC TCTAGCGACA TGGCTAATTT TITITTITTAA TGTATTITTIG TATTITTAGT
ACAGATGGAG TITCACCATG TIGGTCAGGC TGGTCTCAAA CICCTGAGCT CAAGTGATCT GCCTACCTCA GGCTCCTGAG
TCACTGAGAC TGTAGTTGTG TGCCACCATG CCAGGT

# SEQ ID NO:1623: (Length of Sequence = 361 Nucleotides)

TITGAGACAG AGTOTOGCTC TITCGCCCAG GCTGGACTGC AGTOGCACTA TCTCAGCTCA CTGCAAGCTC CACCTCCCGG GTTCACGCCA TTCTCCTGCC TCAGCCTCCC GAGTAGCTGG GACTACAGGC GCCCGCCACC ACGCCTGGNT AATTTTTTGT ATTTTTAGTA GAGACGGGGT TINACCATGT TAGCCAGGAT GGTCTCGATC TCCTGACCTC GTTGATCCGC CTGCCTCGGN CTCCCAAAGN GTTGGGATTA CAGGNGTGAG CANCCGTGCC CAGCCGTNAA GTTAAGATAT TTTAAAAANA TCTCTGCAAG TTGAGGAAGT NITTCAGGAC TCTTTCCTGC TTAGTCTCAC T

SEO ID NO:1624: (Length of Sequence = 350 Nucleotides)

CTITIGIGAGO TITITIGACCI GOGGATOCG AGCCAGATIG ACAACAATGA GOCCTACATG AAGATOCCIT GCAATGACTO
TAAAATCACC AGTGCTGITT GGGGACCCCT GGGGGAGTGC ATCATCGCTG GCCATGAGGA TGGAGAGCTC AACCAGTATA
GTGCCAAGTC TGGAGAGGTG TTGGTGAATG TTAAGGAGCA CTCCCGGCAG ATCAACGACA TCCAGTTATC CAGGGACATG
ACCATGTTIN TGACCGCGTC CAAGGACAAC ACAGCCAAGC TTTTTGACTC CACAACTCTT GAACATCAGA AGACTTTCCG
GACAGAACGT CCTGTCAACT CAGCTGCCCT

SEQ ID NO:1625: (Length of Sequence = 333 Nucleotides)

GTCTTCTGTG AGACAAAGAA ATTATAAAGA TGGCAGAAAT TATTAGCGAC GTTCTACCTC TATAATTCAC GTTCCATGAA
TCAGTACTTC ATTTCTTTT TATGGATGAA TTAATATTCC ACTGTACAAA TATACCACAT CTTGTTTTTC CATTCGTCTA
GGTTAAAAAA TTTTTATTTT TATTTTTATT TTTTTGTAGA GACGGGATCT CACTGTGTTG CCCAGGCTGG TCTTGACCTC
CTGGGCTCAA GTGATCCTCC CACCGTGGCA GTCCAAAGTG GGTAAACTGT ACGCTGGTCT GAAAGACCTT GCTGAAGAGA
GAAGAGGCAA GCT

SEQ ID NO:1626: (Length of Sequence = 314 Nucleotides)

GACTGTCCGT GGACACTGGT TTTTAAGCCC AAGAACTGAA TATACAGTAG CAGTGCAGAC TGCCTCAAAA CAAGTTGATG
GTGATTATGT TGTGTCTGAA TGGAGTGAAA TTATAGAATT CTGCACCGCA GACTATTCAA AAGTTCATCT AACACAATTG
TTGGAGAAGG CTGAAGTGAT TNCAGGACGC ATGCTTAAGT TTTCTGTTTT TTATCGTAAT CAGCACAAAG NATATTTTGA
CTATGTTCGG TAAGNTTCAA AAATATATAG TGATTTGTTT TACTAAATAT AGTTTCAAAT TCTAGGCTCA GGGT

SEO ID NO:1627: (Length of Sequence = 375 Nucleotides)

CCCTGGGCAC CIGGIACCTG GGGACCIACA AGGTGGTGAG GGAAGGGTAC GAGTACATTC CITNICCCTC TGACCIGGGC GCIAGAAGGG CAAAGAACCC GAGCCTGCCA GCTTGGCCTC CTCCCACAGC CTCCCTCGGA GGCATGCCAT GCCAAGCACT CTTTCTGTCT CTGTTCATGA ATAAAAGAGA TGGATGGGCT TATTCTTATA GAGAAGTGAA TTTCACTTAC TCCCCTGGCC CGAAAACTAG ACCAAAATGAG GAACTGTTTT AGCTCATCAA ACTGTTATAT TTATTTTCAA CAATGAAAAC AACACAACAA AGTGGAGTCA ATCCACTAAT TTTTTTAAAT CTAACACAAT TGTTTGCACA ACAAT

SEO ID NO:1628: (Length of Sequence = 434 Nucleotides)

TECACAGGCA CACCICCACI CITTATATCA TITTCICCAT CITTCATTIC CCATCIGIAC CICCAAAATI TIGCIATGAA
TCIAATICAT CITTGCICIC TCICICCAT GGGIGCCTIT GCTICIGCCA GICTITCITC TCCIGCCCCA CCCAAACTIC
AIGAATTAGI CITTCICCC AGGAGCICIG AITICIAGAC TGCTITGAAA AIGCIGIATI CATITIGCIA ACTIAGIATI
TGGGIACCCI GCICTITGGC TGITCITTIT CIGGAGCCCI TCICAGICAA GICTGCCGGA TGICTITCIT TACCIACCCC
TCAGITTICC TIAAAACGNG NACACAACTC TGGAGAGIGI TAAGNATAAT GITACTIGGT AATGIGIATI TATTGAGGAT
TGTTGIGCIA AGAATGNGIA GGITAAAATA GGGG

SEQ ID NO:1629: (Length of Sequence = 341 Nucleotides)

CCTCAAAGCT GCAGGGAGGT GGGGTGGCC GGCAGACAGG GTGGGGTCCG CATCCGGTAC CAGTGACAGC AGCCTCTCCT CTCCCACGGT GGTGCTTGTT TGGGGCTGTG GCCAAAGTGT TTGCCCGGCC CCTGACTGTN TCCTTCCGGA GCTGCCGAGG ACTGCAGAGA GGGCCTGGCT TGTCCCCTCT AGGAGCAGCT GGGNNGGTGT CTTGCCTGCA TCCCCCTTCA ATGGTTGAAA

ATAATGATTC CACTTGTCAT GAACACCATG AAGGTATCTT GGCAGCCAGA GTCACTCCTG TTCCCGAAGT GGGAAACCTN GGGAGGGTCC TCAAAACCCC T

#### SEQ ID NO:1630: (Length of Sequence = 380 Nucleotides)

CATAAAACCA TOCTACGATG TGCTGCTGCT GCTGCTGCTG CTAGTGCTCC TGCTGCAGGC CGGCCTCAAC ACGGCACCG CCATCCAGTG CGTGCGCTC AAGGTCAGTG CAAGGCTGCA GGGTGCATCC TGGGACACCC AGAACGGCCC GCAGGAGGCGC CTGGCTGGGG AGGTGGCCAG GAGCCCCTG AAGGAGTTCG ACAAGGAGAA AGCCTGGAGA GCCGTCGTGG TGCAAATGGC CCAGTGACCC CCAGACGCGG AAACCGGGTG GCAGCGCCAG CCTGGGCCCA GGCATGGAAA CGGACAACCC CTAATCGCCT TAGCTACTGC TTCTAACAAC TCTTTTCCCT TGTGTTAAGG GAAACCAGGT TCAAGGGGGG

## SEQ ID NO:1631: (Length of Sequence = 383 Nucleotides)

AGAGGATTIA TITIGACAGG GCTGTGCTGA GAGTCCCACC CTCACCCCAC AATGGGCGG GGCACTGGCA TCGAACACCA
AGCTGAGTGA GAAGGGCTCC TCCAGGCCTC GCAGGGAGCT TGCTGGCTTC TCCTGGCTCA CAGCAGACTG GGCCCGACTC
CCATCGGAGG AAGGCCAGCA TCCTAGGGCA GCCAGTGGAG GGCTGGCAGA GGGCTGTGCC TNGAAGGTCA CTGTGCTATC
TTCCAACCAC ACTGTGTGAG TCTCAGATAC CATATGTGGA ATCTGCATCA GGAAGGTCAA CTTGAGGTCA TTTTAAAAGG
GATTCTTCCG GNAAAAGGAG CNCCGCATCG GGCGCCTTAA NCCGGCGTTT CGGTTCATCC CGA

## SEO ID NO:1632: (Length of Sequence = 424 Nucleotides)

GOGAAGTGAG CTCCTGAACC AACTCTGAAG GAGACACCCA CTTGCTAAGC CAGTCTCACT CTAGGACACC TGCCTAGCGA
CCAGCAAACC TGGAATGAAA GGGCAAGTTC CTCAGTGCCC CCTCTGCATC AAAGGGAGTG GCTCTGCCCT CTCTAGTCTC
TGACTACCTG CTTAGTGATT TTTGCTTCTG TGCTCCCAGA CCCAAGAAAA CCACGTCTCT TTTCTTCCTT CATCGACTCA
TCCCCTTCTT ACCCTATATT GTCTCCTCCA CTTCCTGCCT CTGCTGGCCA GGCTTAAATC TGGGCCACCA GCCTTCCTGG
GACATACCTA TTTCCGCAAC TGAACCTTCC CAACCCCTAG GAAAACAAAG GTATTTTACA AGGCCTCTGG ACCTTGACCC
AAAGAGGCCAT GNACCATAAT TACT

## SEO ID NO:1633: (Length of Sequence = 417 Nucleotides)

TITITICIAC AGCATCITIT TATIGICTIT ACCATTACIT TAATGCATIT TAAAATTIAT CIACATTAAT TGGGAACIAT TIGCATTITIT TICATCCICI CICICITI'IN CITITICITIT TITIGGATIT GICTIGGCCA GAGAGGITCI CCAACACCCG GGIGGACTIG GAATTITITTA TCAGCIGCAA TCIGAAGACT TGICTITACT GIGGAATAGG TGACATTCCT TTAGGACCIC AGAAGCTCAA GIAGTITAAT GCCAAGTCIT TCCAGAGCCT CACTCICTIT TATITITITAA ATTAGAATTG TGATTTATTG AACACTTACC ATGGGGTTCA TATAATTINI NAATNGANCA GCTTTATTGA GGTATAATTC AATACCCCTT TAAAGNATGT AACCCGTGGG TTTAGAC

## SEO ID NO:1634: (Length of Sequence = 423 Nucleotides)

AATATCCCAA ATGIGCAATG CATCACCIGA GACAGAAGGC AGAAAGCATC AAGCICICIG TITATCCCAA TICAATGACA
ACCAGAACTI ATITITITIG AGATGGGGIC TCGITCIGIC GCCCAGGCIG GAGTGCAGTG GGGCATTCAT GGCTCATCGC
AGCCTCCAAC TCTCAGICTC AAGCAACCCT CCTACGICAG TGTCCIGAGT AGCIGGAACT ACAGGCATGC ACCACCACAC
TTGGCTCATT TTTAAAAAAT TTCTTGTAGA GACAGGATCT TGCTACATTG CCCAGGCTTG AGGIGCCGIG GIGCATTCAC
AGCTCAACGC AGCTCAAACT CTTTGGTCTC AAGCGATCCT CCTGNCTCAG CCTTCTGGGT GGCTGGGCCT CAGGCATACA
CCACCATGIC TTGGTCAATT TCT

SEO ID NO:1635: (Length of Sequence = 384 Nucleotides)

CAMAACTCAC TITGACCCCA TIAAGAGGCA AGCCIGGCAC ATCTATCCCT GGGCCTITAG AAAGCCATIT GCCTCAAATG
GCTATAGGGT TGIGGGGIGG AGGGAGGAAG GGCTGGGAGG GAGTINGGGAG GAATTGCTAG CTGTAGTGTG ACACATTGTA
GTGTTTGCCA GGAAATGAGC CAGACATGGT GGTGTATGCC TGTAGTCCCA GCCACCCAGA AGGCTGAGGC AGGACGATCG
CTTGAGACCA AGAGTTTGAG CCTGCGGINA GCTGTTAATG ACCACGGCAC TCAAGCCTGG GCAATGTAGC AAGATCCTGT
TMCTACAAG AAATTTTTTA AAAATTGAGC CAAGTTTGGG TGGTGCATGC CTGTAGTTCC ACTA

SEQ ID NO:1636: (Length of Sequence = 362 Nucleotides)

CAAAATGACT GACTACAGCA ATGCCTTCCG TGTGCCCCAC ACATCATGAG CACCGCAAGA GACAAAAGAT TAACTATGAA
ATATAGTAAT CTAAGCAAGC CCACACATAC ATATTTTTGG GGATTTCCCA CCATCCTGAA TAGTATCACT GCAGTTGACA
CAACTTCCAG GGAACTGCAG AGTAAGTGCT TAATATTATC CACGAGAAAG CAAAACTAAA TATTAGTGTG CACATTTCTG
AATGAGAAAC TAATTGCTTC ATTGATTTCA ACAATGTAGT GGNAGNAAAC TATTTCAGAT CTCTACAATG CCTAAATGCA
TTCTATTTAA ACTCAAGGTA CTATTTTCAT TTTTACCATA CT

SEQ ID NO:1637: (Length of Sequence = 205 Nucleotides)

GEOGCOCCEAC GAGGCTCAGA CCTCTTNTAC GNCGACTACT ACGAGGACGG CGAGGTGGAG GAGGAGGCCG ACAGCTGCTT
CGGGGACGAT GAGGATNACT CTGGCACGGA GGAGTCCTNA CACCACCAGA ATAAACTTGC CGAGTTTANC TCACTAGGGC
CGGACCCGTG GCTCCTTAGA CGACAGACTA CCTCACGGAG GTTTT

SEO ID NO:1638: (Length of Sequence = 253 Nucleotides)

CACTCAGGCT CACCGTCCTG CTCTCTGCAC CAGCCTTTCC AGAGCATNCC AGINCTCATG GCTTCATCTG TTAACTGTTG ATCACTTCAG TCCTGATTTT TAGACCTAAA TGGTTTCCTT AACGCCATTC TAACTGCCTG TGACTCATTT TCACTTACAG TGTTTATTGT AACGCCAAAC CAACAAATCA CAGGTGCTTG CTTCTGTCCA TAAATCTCCC CAGTCTAACT TTTTGTCATT CAACATGRCT CGT

SEO ID NO:1639: (Length of Sequence = 360 Nucleotides)

TERCAACAAA TERCCCCTA CATGAAGATC CCTTGCAATG

SEO ID NO:1640: (Length of Sequence = 321 Nucleotides)

GTGGGACGCC CTCTGCCTTG TCCTGAGAGC AATGTCTTCT CCATGGGGCA GCATNGGCCC TGGATGGGCC TGAGCATAGC AGACCACGTG GTCACATGTG CATGTGTGGA CATGTGTGCA TGTGTGGAATA TGTATGCTCC TGAGTGTATC TGCATGTCCT NCCTGCACAC ACAGTGCTCC CCTCCGATGC TGCCAGCCTG TGGTGGACTT CCTCTTCTGA CCCCTTTCTT GCCNCCGGNC TGTTTTATCA GTGAAAGGAC TTAACTAAGC AGATCTCCAG GTTCACCTTN TGGAACTCAG CTCAAGGTNA GCACAGCAGG T

SEO ID NO:1641: (Length of Sequence = 266 Nucleotides)

GGIGGIGCCA CIGICGIGAT AGITTITCCC ATCITAGIAG CCCNACCCAT AAITAATGCC TACTCACATC AAGITAGCAC CACTCAAATG TGGGCCATTC ACAGGCAGCC AGGGATCCIC TTGGNCCGIG AGGTIGGGGG CTINCATCAG AATGCAAATC

TROCGAGGOG TGAAGCACAA TITAKTTCAA CTGCCATKTK TTCCTTCACA GTAAGRCCTT CTGGRGGAAG GAAGCAGTGT GTTTGAGTTA TACCTTAGGC CAAGCT

SEO ID NO:1642: (Length of Sequence = 295 Nucleotides)

AAAAGCCCCA GCCTCAGGAC CCCGGTCACA GGCACCCGG GGTGGGGGTG ACCAGCAGCA GTTCAGAGGC AGGTGTGGGC
AATGTGGGCC TGAGTCTCCT NCCCACTCAC GTCACTNCCC GCGGGGACAC AGCGGCATTT NTGGGGCACT NCGCATGCCG
GGTTCCTAAC CTCAATTATT CATTCTGCTC TCAGGCACCT CCTGACGAGA CCCTGGCCCA GGAGAGCTCG GCTCGGGGAC
AGAGGAATGA GACTCAGTGG GACGCAGAGN CCAACCCCAT CCCCACCCCT GGGCT

SEQ ID NO:1643: (Length of Sequence = 359 Nucleotides)

ATCATTGGIA GITTAAACIT TICATCTAAT ATTAGATTGC ATGCAGGATT TIATATCTAA TIACTCTGGC AGATGGCCIT
TAGAAAGITC AAAAATAAAA TGCAGCAATT CATATTGGCA GATTTACTAT TGAGACCAAT GCTTTCTTAA CTAAAAGGIT
TIGITTAAAA TCGITAGITT AGGAAATCTG ATAAAGATTT TTGAATATCA GAGCGITTAA AAGAGATTCT TACTTTACAT
CTGGCATATT TCTTGTGITA CATATTATAA TTCCATTGGA ACATGGCTGT CTGTAAAACT ATGTATATGA TCCGGAAGAG
ACTCAAATTA AATTAAGGTT TAACAGCCAT CAAGTTCAT

SEQ ID NO:1644: (Length of Sequence = 293 Nucleotides)

TGAACCCGGG NGGCGGASTT GCAGTCAGCC GAGATGGCAC CACTGCACTC CAGCCTGGGT GACAGAGCCA GACTCTGTCT CAAGAAAAAA AAAAGAATTA AAAGATGTGA ACAAAAGCAA GAAAGTGCTG TATGAACGAA ACGGAAATAT CAATGAAGAG AAATAAAAAAT TATAAAAATTC AGGAAATGAG ANGTACANTA NCAGNAAATT CACTGGAGAG ATTCAAAAAGC ATATCTGAGC AGGTAAAAAAA AGTAGTGAAC ATGAGATAGG TCAAGGGAAA AGTACTGAGT CTG

SEO ID NO:1645: (Length of Sequence = 332 Nucleotides)

AAAAGCIGGA TATTAGGAAA TGIGAATATT AATTCIGAAT TTGITACIGA CTCAGGATGA CCTTGCATGA TGCATCCAAC
CTTCTTTCT CTATATCAGA AAACTAAAGA ATAAATGTAA CATCACATTC TTTTCTCCTT TGGGACAAAC AACTATGTAC
AATTGAATAA AAATGAAATT GCATAAGTNG TGGATAGAAT ATGTTTGGGT TGGTTTGAAC TTAGCACACT GTTTAATAAT
TCAACATTTT TTATACCTGT GCAATAAATT TTTAAATGAT GTCTGAAATG CTTTGAAATC TTCAGAAACA GGTTTATAAA
TCGCATAAAA AA

SEQ ID NO:1646: (Length of Sequence = 210 Nucleotides)

GAAAGINCTC CCAATCACTC TCTGCACAAT GAAGTGGCGG ATGACTCCCA GCTTGAAAAG GCAAATCTCA TAGAGCTGGA AGATGACAGT CACAGCGGAA AGCGGTGGAA TCCCACATAG CCTGAGTGGC CTGCAAGATC CAATTATAGC TCGGATGTCC ATTTGTTCAG AAGACAAGAA AAGCCCTTCC GAATGCAGCT TTGTTAGCCA

SEQ ID NO:1647: (Length of Sequence = 246 Nucleotides)

TCCACTCCAA GGGTTTCTGA CCCAAGAGGT GGGGACCAAA ACCATGCATT CCTAAGAAGT CCCCAGGTCA TGCTGCTGTT
GCTGGACTGA GGACCACACT TTGAGAACCT GTGCTCTAAG TGAATACTTG GAAGTCGTTT CAGGACATGG GGCATAGAAA
CTNAGGAGTA GCTGAGAGGA AAATNAAGAG AAGCTGAGAA GAAGCTGAGG ATCCTCACAG GAGCAGACAG AGAAATGTGA
AGGGTT

SEO ID NO: 1648: (Length of Sequence = 338 Nucleotides)

TCCACTCCAA GGGTTTCTGA CCCAAGAGGT GGGGACCAAA ACCATGCATT CCTAAGAAGT CCCCAGGTCA TGCTGCTGTT GCTGCACTGA GGACCACACT TTGAGAACCT GTGCTCTTAAG TGAATACTTG GAAGTCGTTT CAGGACATGG GGCATAGAAA CTGAGGAGTA GCTGAGAGA AAATGAAGAG AAGCTGAGAA GAAGCTGAGG ATCCTCACAG GAGCAGACAG AGAAATGTGA AGGGTGGGGT TTTATGTNTG GGAAAGGGAC CCGAAGCCCA GGCTGAAGAG TTTTAACTTT GGGCCCAGAA ACTCAACCAT CAATGGAAAC AGGGCAGT

# SEO ID NO:1649: (Length of Sequence = 275 Nucleotides)

GCACCTINAG GATIGAGACC CGGAAGGCTT CAAAGGCTGT CGCAAGGAGG AAGAACTGGA AGAAGTTCGG GAACTCAGAG
TTTGACCCCC CCGGACCCAA TGTGGCCACC ACCACTGTCA GTGACGATGT CTCTATGACG TTCATCACCA GCAAAGAGGA
CCTGAACTGC CAGGAGGAGG AGGACCCTAT GAACAAACTC AAGGGCCAGA AGATCGTGTC CTGCCGCATC TNCAAGGGCG
ACCACTTGGA CCACCCGNG CCCCTACAAG GATAC

## SEQ ID NO:1650: (Length of Sequence = 270 Nucleotides)

AAAAGCCAGA GGGATGAGAA TGAGAAAGTT AAAAGGGAGG TCAGGAAAGC CATCTTTTAG GAGAAATATA AATNGACAAT
SCTTTAAAAA AGGAGCTGCC ATCATATTAT ACCCTGACCC AGCTGGATAC GAACAAATTC AGCCTTGGCA ATGCAAGTCT
TACATCTATT TTATATAGAT TGTATAAAAG AGAACTGGAA GCATTTTCAA GAGGGGTATG TATGTGTTTG TGTGTGTCTG
GTAATTAATG AAAGAGAGGC TATTGAATTT

# SEQ ID NO:1651: (Length of Sequence = 372 Nucleotides)

TCTIGCTTT TAATIGIAT TCTTAACACT AGAATTICT ATTICAAGIT TITGIACGIG GCCITGCGIC TCCTTAGIAC ATTITATAGI CGCIGIAAGI TGAITCCATT TITCITGAAA TIGAATTCTC ATCIGACCTA ATTICITCCT TGAATCCTAC ATCICACITT CTCAATGGAC GCAGTGACGC AATGAAGCAT CCAGCAAAGC TTTTGTTGTT GATTGTTTAG GACGTCACCC TGTTTTTGTT GAAGTTGTCT CACAACTACT TCTCTTCTCG CTTTCTCTCT TTCATATTGA CATTGTTTTT CTTTTCAAAT GGATTAACTT TATTGATCAT CCTCTTGINC TTCTAGCAAA AGACGGTGC TT

# SEQ ID NO:1652: (Length of Sequence = 314 Nucleotides)

TITICIGAGIA TECTECACIE GATTATTAGC ATETIAAATA GICAAAGGGA CIGGAATAAA CATCAGGAAG ATTICATAAA GIGGIGIAAG TAGAAAAAAA AGGITAAACA ATGAGCIGCA TEITGATAAG TATAAGACAC TGATCCAAGT GGIGGCITCT GAACCATGAT ATTACITAAN CIAGAGIGIT AAGGICAGCT TAAGICAAAA TAAAACAAAG CITCCAAACC CICATITTAA ACCAGIAGA TAATAGATGA MICITGIATC TIGGGAGATA GIACAAGCCA AANGITACAG CIGIGITAAA ACCT

### SEO ID NO:1653: (Length of Sequence = 323 Nucleotides)

TAGATATGAT GECTGGAGCT GCAATAGCTA ACTTGCAACT ATGAGGAACT ATAGGACTTT GGTCTTAACA TTCCTGAGCT
CCTGAATCAA TACTTTAACT ACCTTCTATG AGACTTCTTG TCACATGAGA AAAATTAAGC CCCAAATTAA ACCCCTGCCT
TTNACTGTAA CTCTCAATTG AGCATAATTC CTAAATGNIT TAATCAATTC TACTCTACTC TGGCATGATT TTNAAGGCAT
TAACCATAAT TTCCTTCCAA TCTAAAAAAGG GAACTANTAC TTACTGGAGT ATCTAGTATA CATCAGATAC TGTGTATATA
GGC

#### SEO ID NO:1654: (Length of Sequence = 352 Nucleotides)

ATCTIGGCCI GCAGGAACAT GGCAAGGGCG AGIGAAGCAG IGICACGCAT TITAGAAGAA IGGCATAAAG CCAAGGIAGA AGCAATGACC CIGGACCICG CICIGCICCG IAGCGIGCAG CATTITIGCIG AAGCATICAA GGCCAAGAAT GIGCCICTIC AIGIGCITGI GIGCAACGCA GCAACITTIG CICIACCCIG GAGICICACC AAAGATGGCC IGGAGACCAC CITICAAGIG

AATCATCTGG GGCACTTCTA CCTTGTCCAG CTCCCTCCAG GGATGTTTTG GTGCCGCTCA GCTCCTGCCC GTGTCATTGT GGGTCTCCTC AGAGTCCCCA TCGATTTACA GG

#### SEQ ID NO:1655: (Length of Sequence = 325 Nucleotides)

AGGGTAAATT GIGAGACTGI TIGTATATAT INITIGITIA TATGITTITG TIGTIGITAT GITGITATNI TITATITATAA
AATGATAGAT CIGTGGTAG GITCIGAGAA AIGAATAGCI TGTATITCCI TITTITATGAA AGAAGAACAA AATGAAGITC
AAGTGGAAAG TATCICCAGA AAGITTAACA TITTCITATT AACCAACTCA TIGATTGGCA TGTGAAACTT GAGATATTTT
ATATAGCACT TITTAAATGA GGATCTAGCI TCACINIATC ATACAACCAC ATTTAAAATA GCCAGGTCCA TGGTCATTAT
ACGGG

#### SEQ ID NO:1656: (Length of Sequence = 285 Nucleotides)

GAGGNITAAT AGAATAGATC AAAGCAGAAT GCAGTGTGTI CATGTCATAG GITGACTTCT CCAGGAAACC GACCCCAAGT
GGAAGGTTTA CATGCAGGTG GITTATTAGA GAGTGATGTI GGGAAGAACA CCTGTAAGGN AAGAAGGGAG CCTGGGAAGA
GCAGNGGNAG AAGGTGAACT CTGATTCACT TGCAACAGAG TCCTAGGCTG AGTGCATGGG ATNCTGTAGA GTTGGGGATG
GACCTTCAGA GATATTCCAA ATAGAGAAAG AATTCCTGTT TACTC

#### SEQ ID NO:1657: (Length of Sequence = 385 Nucleotides)

GACTIGACTI TECTTITITIC COCCCAAGTA GAACTAATGC TAGCTTCCAG CTIGAAAGTA AAACTCCAGT GTGGAGTGAA
TITTGIGICT AATTATAAAC CTGTAACCAA AACTCAGACA TCTGGTACTG GTCTTTGCAT TGAGATTGGT CCCTGTAAAA
CCCCCTTTAA AAGCATATTG CATTTAGTAC AGAGCTCTTT TTTGAAATGN AGGCTGGAGA TGTGCATTTT TCACGGTGTT
AACTGGTTGT ATCTTATTAG CAAGGAGATT GGGGGTTTTG AGTGTTTGCG TGGGTGGGTT TCAAAATTTGC CAGGGGAACC
AGTGGGCAGG CTGCTAGCAA GGCAGTGAGG AAGCTCTTGG CAGCCAAATG GGGTGCATTT CAGGG

# SEO ID NO:1658: (Length of Sequence = 338 Nucleotides)

GATCAGGACC TCTTCTTCCT CCCAACACTG CCCCAAGAGC CCGTTGTTAA ACGTTTACCA GCACACTACT GGGCTGTTTC
TCTACCACTT GATTGAAATG ATCCTTATGG AAGCACAAAT GACTTCACTG TCACTAAATC CAAGGGACAA TTTTTAGTCT
CTATTTTTCT TCAACTCTCC AGGATGTTTG AGAGCTGATC TTTCCCTCCC TCTTGAGCCT CCTCTCCTGC CTGGCTTTTA
GGGGTCTCTG CTGACTTTTC TTCATTTCTA AACACATGTN CTCAGGGGGT CCTCAGCCCT GCAAGGCCNA TGCACTGGGT
ACCCAGTCCT GTGGGCCT

#### SEQ ID NO:1659: (Length of Sequence = 346 Nucleotides)

AGIATGIGAA GICAATCACI TITITATATGC AGATAATATG CGACITIATAA TGGAAGGICA CGITICAATA GCAAACAAAA
AAGCIATAAG TAACAAAGAA TAACAAAACI ATAAATGIAT AGGCICTACA TAAAGAAAAC TATAATICCA TAAAGGAICT
AAAATAAAAAC GNGTAAATGG AAAGACAAGA TGTGTTGTGA GATACGAAGA ATCCATGATT AAGTTAGAGG ATTCTTGGAT
GACAGTAGAG TAGAAAGCAC CAAGAATGAG TCTGTATACC CAGAGAACAC TTACGCTGGT AGGAATCTAT CTCATACAAC
TATTATGGAG CTCTCAAAGT ATACTG

## SEO ID NO:1660: (Length of Sequence = 240 Nucleotides)

GATAGAATAG CCAGCCTTCC ACTIGAATGC ACIGCCATAT TGICAAGCTG CATTCCTTAA GCATCACTTC TTAGAGGCCT
CAAGCTTCTC GGGAATGTTT GATGACTTAA AGGGGAAATG AACAGGTTGC AATNATGCTT GTCAAGAVITC TTCTTGTGAA
CCICIATTTG GACAATTCAC ACAAAAAAAG AAAGCAGCTC ATTTTCTAAT TCAGGATATT ATTTCTTTTT AAAACTGGTA

SEO ID NO:1661: (Length of Sequence = 294 Nucleotides)

AGCACCICCC CIGAGGECCA GECCTIGGAG AACCGEATGA AGCAGCICIC CCIACAGIGC TCAAAGGGAA GAGATGGAAT
TATTGCIGAC ATAAAAATGG TGCAGATIGG CIGATTCATC CIGGGCCCTG GCCGATATGC ATATCAACAT TIATACATGG
AACIGIGAGA ACATTKIGCC AATAATCAIT TAATATATGC CAAATCITAC ACGKCIACIC TAAACIGCIC TAATGAAGIT
TCAGIGACCT TGAGGGCTAA AGATINITCT TCIGGIGIAA GAGCTCTITIG GGCT

SEO ID NO:1662: (Length of Sequence = 291 Nucleotides)

GATTITICATE AGGCAAATNA AAGTAACCAC AGAAACAATT CAGTAATACT ACTAAGAGAG ATTAACTICC CACTGGCCTT
GGAATAGCTA AGTGCATTGA TITIKGTGTA GITGTGAGTT TITITCTYTC ATTGATATIT TACGTATIKC TGGGGTAAAT
GTATTITIWA CATGCATTGA ATGGGTAATG ATCAAGTCAG GGTATTTGGG GCCTCCATCA CCTTGAGTGT TTATCATTTC
TATGTGTGGT AACATTCCAA GCCCTCTCTT CTAGCTTTGG AATATATAGT G

SEQ ID NO:1663: (Length of Sequence = 345 Nucleotides)

GGCAGIGGGA CICICIGIGG ATAGACTIAT TCTIGITTAG AAACAACAGC AAAAAGAAGA AGGCAGGAAA GAAACTCCCC
GGCTCGGAGG AATGICICIG TGATCCCCAT TCTIGATGGA GGGAGIGAAA AGGGCCCTGG NCTICGCCCG CIGCTCTCCT
GACAGAAACA GTAAGINACA CCAGGACAGA AGGCAGGAGC CCTGAGAACT CACGGCGCIC TGCATGGICT CCAGCCNNNC
ACCCGTCTCC AGCCACCCCT GGAGCGGCCG TGGGGAGGCG GCAGAGGGGG CTTTTCGGAG GGCCCACTAT TNCCACACGT
CTTTCTTING ACACCCAGAA AACTT

SEQ ID NO:1664: (Length of Sequence = 334 Nucleotides)

GIAAATAAGA AAGIGAAATA ATTOCTATAA TGIAAGGITG ATAGAAGATA ATCATCAGGG TCAGAATTAA GAGGICITGT
GGITTAGGAA GCATAAAATT ATGIAACTTA TIGITTATTT CACTCAGAAA ATAAAAGTAT TAATGAAAGG AGITAGAGAT
GAACAGATTG ATACAAACTG TTCTATGGIT TACAGCTTAA AAAATAAAGG TACATTTAAT GCTATGCATT TTGAGAATAA
TGTCTTTTAT GCINITCCIT TTTACATATG TATCINITIG TATTTAAGGT CAAAATAGAT TGACATTACT AATTACTTCA
CTATTAATAA TTAA

SEO ID NO:1665: (Length of Sequence = 310 Nucleotides)

TGTACINCTA TGAAGCATCC CTTCCACATC AGATCAAAGA CATCTTAAAG CCAGAAATAA TGGAGGAGAT TGTGATGGAA
ACACGCCAGA GGCTTTTGGA ACAGGAGGGA TAAGGAGGTG CTCCAGAAGC ACGGGACINT GGACCTTGCA GGAGTGAAGA
CTGTRATGTG TGGTCCCCAT ATGTGGCTCA GCAAAGACTC GAGAGATCAT CCCTTTGTCT GCATTGACGG CCCTGTGACG
GCCTCCAGCC CACAGGCCTG CTTTCTCCTG TCCTAACACC AAGCCTGGGT GGCAGATGAA CAGTGCTTCC

SEQ ID NO:1666: (Length of Sequence = 352 Nucleotides)

THITTITIA CATACAAAGI TIGGATTITI ATIGAAATCI TGITAGGIAT CAAACAAATT CIGCITTCIT CAGATAAAAA
TAITCICICA GATGICICCA GATAACIGCI AAGICIAAAT TGGICCITCA ATGICTIAIT TITAITGICC TCGIGAAATG
TTCATATACA GITAAGATGI TCCCAAAAGG ATTITTATCG TGIAAAGGAG CGIACATGAC GACCICIACC ACTGCCTCCA
CTAACAAACT TICCTCTTGA GCCICCACTG CCGCTATTTG CACTAGCCCA GGGAAGGTCC AAGICCCCCA CGACCTCTAG
AAGCACGGIT CCGAGGGACT TTGGCCGTAA CC

SEO ID NO:1667: (Length of Sequence = 287 Nucleotides)

GACAATNATG CCGCTGCCCA CATTITGGTC CATTCTTTT TTTATTATGC TTCTCTTNCT TGGACTGGAT AGCCAGGGAT GTTTCANCTT CTCGCTCGTC AAGTACGTAC CCCTGACCTA CAACAAAACA TACGTNTACC CCAACTGGGC CATTGGGCTG

GGCTGGAGCC TGGCCCTTTN CTCCATGCTC TTNGNTCCCT TGGTCATCGT CATCCGGCCT CTGCCAGACT GAGGGGGCCG
TTCCTTTGTG AGAGTCAAGT ACCTGCTGAC CCCAAGGGAA CCCAACC

SEQ ID NO:1668: (Length of Sequence = 300 Nucleotides)

CCAGACAAAT ACCAAGITTA TITCACAAAC ACTAGGAAGA TGGGTTGAGG GTGGAGGTGG GGGACACAGG TGCGCANTGC
ACAGAGTCAG CAGCAGCAGC CTGNTCCCCG CACTGAGGAC TCGGCCTGGA CTGCAGTGCC TCCAAATCAA CACGCAGCAA
GAGGGGAGIN CAGNGAGGGC CCINAACACC AAGCCTCTGA AAGGCTAAGG GACACAGCTC CATCTGTCCC AGGAAAACCA
GCAATAAATA AAAGINNGGC ACGCCCCAC CCACACATAT CATCTAGTCA CCCATCTTCA

SEQ ID NO:1669: (Length of Sequence = 334 Nucleotides)

TTTTAATGAC AGATTITCCT AAAAGAAACC ACTATAACAT CIGICCAAGI ACTCCAGAGA AAACAAAAAA TACATAAAGA
TTAAAAGICT ATTACTITAA CAGCACATIG CCAAACACG ACAACTAGA TAAATGCCAA GAAACCITAA AAAATAACTI
TAAAAGATGC AACGITCAAG CCATTCAAAC GCGTAGGITC CACAAACAAC AGGNAACAA GTCCAAGAGC AGTTCTACTI
GTGCATGATG GTAACTCAGA CIGIACTICA TCAAAGITCA TTCAGGIGIT TCATAGGCGT CIGAGCAGAG TTTTGTTTTT
TTCTTTCCTT GCTT

SEQ ID NO:1670: (Length of Sequence = 287 Nucleotides)

GATAAAAGAG AAACAGCGAA GTTTCAAGAG AAAAACTTGA GGTCTTAATA ATTNITGGGC AACITGACAG CAGAACAGGG
TAAAANIGAG TTAGCIACAA AGGCTCATCA GAAAATGGCA ATAGATTCCA GAGAGATTTA ATAACTACTT ACAAACTCTG
CTATAGGTGA CAAATCTGAC CATGATAAAA GCACCGTAAA TGATATAGGT AACACTGNGC ATATGAAAAC TCAGACTGTG
CACTAGATAA AAAGGAANCC CAGCATACAG TGTTACCACA TGTAAAT

SEQ ID NO:1671: (Length of Sequence = 187 Nucleotides)

GATAAAAGAG AAACAGCGAA GTITCAAGAG AAAAACTTGA GGTCTTAATA ATTITKGGGC AACTTGACAG CAGAACAGGG TAAAAWTRAG TTAGCTACAA AGGCTCATCA GAAAATSGCA ATAGATTCCA GAGAGATTTA ATAACTACTT ACAAACTCTG CTATAGGGTG GACAAATCTG GCCCATG

SEQ ID NO:1672: (Length of Sequence = 329 Nucleotides)

ACATCACAAC ATCGITTATT ATGGGAATTI TITACAATAC AAACAAAAAA TACAGAAATG CAATATATGA ATACAGCTAA
ATGCAGAATG GIGACITTIT TCTCTTCAAG AGGCCATGAT TCCCATTICT AGTAAAATAA AGAGACTGCA TATAGGTAGA
AACAGGITGG TCATTAGCIT CACAATTTTG CCTAGAAATG ATCTATAAAT GCATTTCCCC CCCTGCTACT TACCCTAAAG
TGTAAAAAGG GAGTTAAAGG AAAGTTTCCT TGTTGGTTCC TACCATATGA AAGATGCTAT ATTCTATTTT AGCAGTGCCA
ATATATGGG

SEQ ID NO:1673: (Length of Sequence = 386 Nucleotides)

CTCCCIACTG TGATTCTCAT CAAGCTGGAA GCGINGTGAG AAAGCACTTC AGTTTCTTCC CTCGGATATG AACCTGAGCT
CTCTGATGAG GTGGITTAGA AGTGGCCCTG GGAGAAGCCC ACTTCTTGGT CACAAGATAC TGCATTCTCC TGGCAGATGA
ACCAGCTGCT TCCAGCATCC TCTGTGTGGG TCCTCACGCC TAGCTGCTCT ACGTGCTGGC TGCACAGTGG CATCACATGG
GGAAGIAGAA AAACCTCTGA TGCCTGTCCC CACCCGGCTT AATCACAGTG AAGTCAGATT ATCTGGGNCT GGGACCCTAC
CATCATTTTT TTTAAAGAAT TGCAGGGGCC AGGGCGTGGC GGGCTTCAGA GCTTCTTAGC AATTTT

SEO ID NO:1674: (Length of Sequence = 377 Nucleotides)

## SEQ ID NO:1675: (Length of Sequence = 381 Nucleotides)

CAGAAGICAA TOAGCTACGO ACCCAGITCT CAAAGACCTC ACATGCTAGG GAAGGTGCGG AGGCAGAGIT GIGGITCAGA
AGCAGITACA GGICTCAAAG CAAGAACAGC AGCCAAAGCT TOCACGCCCT GACGCTGCCT CTGAATGGTA AACCAATGGC
ATATGGIATC CACAGCTAGG CITTGCTTTT TTCTGAGIGA AGGIAAAAGG CATITGAAAA TAAACCAAAG TITCACAGAC
TATGITTATG GAACAAACAT GGGCCATTTT CAGGGATATA AAAGTCGATG TTCTATGTAG GCCCCCATAT GAGIATITAT
CTACTTTTA TTTACTTTAT TTTATGGAAT TTATTTGACA AGGGGCTTCA CTCTGTTCGG A

## SEO ID NO:1675: (Length of Sequence = 404 Nucleotides)

CTGTGTTGAT TGCTTGAGCC CATCACAGIT TAGCTCTCAC AGCTTTAATT TACTAGCCCA TGAGAAGTCA GCTTCAAAGA
ACACCATTTC GACTCTCAAA GAACATTATC AATGTACATG GATAGCTTCC AACTTCATAA GGTGTTTCTC TCTACCTAGA
GCAATTAACA TTAATTTGCA GAATAGTGTT TATTGAAAAAC CTTTGTGTAT CTCCAACAAA GTAATAGTGT ATTGATTTCA
TTCCTACTAT CTTCAACTGT ATCATTAAGA GGAATTTCTT AGGNAAGTCT ATATGCAGTA AGCAAGTAAG ATCGCAGAAC
ATCAAAGGGN GGAAGTAAAT CCCAAAACTG GYTTTTACCT TCCTTTCCCT TAGGTGAGGG AAAGGAATTT ATGGTTTTAA
AGCT

# SEO ID NO:1677: (Length of Sequence = 388 Nucleotides)

ATGGACAACT ATGAGCCAGG AGTCTACACA GAGAAGGTTC TGGAAGCCAC TAAGCTGCTC TCCAACACAG TCATGCCACG
TTTTACTGAG CAAGTAGAAG CAGCCGTGGA AGCCCTCAGC TCGGACCCTG CCCAGCCCAT GGATGAGAAT GAGTTTATCG
ATGCTTCCCG CCTGGTATAT GATGGCATCC GGGACATCAG GAAAGCAGTG CTGATGATAA GGACCCCTGA GGAGTTNGAT
GACTCTGACT TTGAGACAGA AGATTTTGAT GTCAGAAGCA GGACGAGCGT CCAGACAGAA GACGATCAAC TGATAGCTGG
CCCAGAGTTG CCCCGGGCGA TCATGGCTCA AGCTTCCCCA GGGAGCAAAA AAGCCGGAAG ATTTTCGG

# SEQ ID NO:1678: (Length of Sequence = 428 Nucleotides)

TAACTGTGCA AATAATCCAT GAATATATTG TITTTATACA GCATTACAGA TAAGGCTTGC AGCTCTATAG ATCACCCTCA TCCACTCCTT CACTCCATTG CTACACTTAA AAGCCTCACA TGCTCTCCTG TCCTCTCCAA AGGCAGCTGC TAGCATCAGC GCCCACAGTA GCCTCTTTT GTTTCCTGTT TATAAACCAT ACATTTTCTA TGGCTACACA TACGTGTATT GTTTGATGCT TTCTAATAAA ATTGTATCAT AGTGGTACAC ATCTTTCACA CTTTCCTNAT TACAGTCAAC ATTTGGNGGA ATACAGAATG CAGCAGATCA AGGANCTTT CTCAGTCTTT TCTAACATCAN CCCCAAATAC AGCCTCACTA TGGGGTCCAT TTAGGNGGCT CATTGGTTTT CACTCTCACA ACGGTGGC

## SEO ID NO:1679: (Length of Sequence = 256 Nucleotides)

GGTGTCCACA GCCTGCTGCC TGGCCTGGAG CAAATACCTT TGTTAAGTGC TCAGAGGGTA TGGCCCCTCA AATCCACCCT GCAGCTCCCT GGCTGCAAAT ACACTCACTC CATCTTTTCA ACTCGCTCCC TGGACCCCTG GTTAACACTT CACTGTAACT CCTCAGTTGT ACAAAGCATT TTCATTTGAA TACAAAAGGC AACTNGNCAC CANATGGGCA TCCTTGAGCC ATGGTAAACA CTGAATTTNA GGCTCA

SEO ID NO:1680: (Length of Sequence = 438 Nucleotides)

TACCAGIAGT TOCTITOCOG CITTATITIT TAGCIGCTIT TIGGGITTIA TACAATGAAC ATGITATIAAT TGIAGAAGAA AACGATGICA TOCTITATGA TAAAATCCAT TICCATITIA GCITTITIAA AAAAACAAAA AGCIGTIGIG GACAGATGAA CATCCAAGIA CIGGGCACAC CICCAGCCCT COCTCITOCA CIGAAGGCCA TIGCCTATIC CITAGAAAGIT CITTCCCAGG TATGCAGCTT TCAGITTCCA CITCAGAGGC CACAGIGICI GGGGGAACGG ACTGCCCCCA ATACTAAAGG GAGTCAAAAT CICTITIAATT NOCGCACTIC CICAGTACCA ACAAGGAAGI CCCITCITTA GGGCCACTGG ATGGGAACCT NGGGACCCCC CITTITTTGAT TGGCAAGCAT TGGGGANCCT AGGGCCTT

SEO ID NO:1681: (Length of Sequence = 370 Nucleotides)

SEO ID NO:1682: (Length of Sequence = 397 Nucleotides)

ATGIAATCCG CTGCACCAAA CACACCTTCA CCAACCACAT GGITTITAAG TITGACTGCA CAAACACACT CAATGACCAG
ACCITGGAGA ATGINACAGT GCAGATGAG CCCACTGAGG CCTATNAGGT GCTCTGTTAC GTGCCTGCCC GGAGCTGCC
CTACAACCAG CCCGGGACCT GCTACACACT GGTGGCACTG CCCAAAGAAG ACCCCACAGC TGTGGCCTGC ACATTCAGCT
GCATGATGAA GITCACTGTC AAGGACTGTG ATCCCACCAC TGGGGAGACT GATGACGGAG GCTATGAGGA TGAGTATGTN
CTGGGAAGAT CTTGGAAGTT TACTTGTAGC TTGTTCACAT TCCAAAAAGGT TCATGGAAAC TGAACTTCGA GCAGCCT

SEO ID NO:1683: (Length of Sequence = 396 Nucleotides)

GECTECECAE AGGAGCOGCT CTCGCCGCCG CCACCTCGGC TEGGAGCCCA CGAGGCTGCC GCATCCTGCC CTCGGAACAA
TGGGACTCGG CGCGCGAGGT GCTTGGGCCG CGCTGCTCCT GGGGACGCTG CAGGTGCTAG CGCTGCTGGG GGCCGCCCAT
GAAAGCGCAN CATGGCGGCA TCTGCAAACA TAGAGAATTC TGGGCTTCCA CACAACTCCA GTGCTAACTC AACAGAGACT
CTCCAACATG TGCCTTCTGA CCATACAAAT GAAACTTCCA ACAGTACTNT NAAACCACCA ACTTCANGTT GCCTCAGACT
CCAAGTNATA CAAACGGTCA CCACCATGGN AAACCTTACA AGCGGGCATT TTAATTNCAA ACANCAACCA GGGGAT

SEO ID NO:1684: (Length of Sequence = 417 Nucleotides)

ATCCAGGGA GATGCATGIG GAAATGIGGT CCTCTGGGGT CAGACCCCTG CACGGGACAT CTTGCCTTIN AGTGIGCAGA
GTACATGGGG AAGGGGTGG GGGCACCACT GIGTACCTGG GCCCAGTAAG GCATTTGCCG TGATTCCCAC AACGGGGTCA
AAAGCTGGCC TTCAGGGTGA CCTAACACCA CCTCATGCCC TGCTATAGAC CTTCACAAAC GACTTCCACT GCTGAAGCCT
GTAGGCTCTG TTTAGAGACA AGAAGATGGC TGGTAATTTA AGCACCGATT TCCCAAGTGC CCACTCTCCT TTGTGCTCTG
TTGGCTTTTG GCCTAAAGCT TNNCCCAGAG TTAGGGTGTA GGATGTCTGT GGTCTGTGAG ATGCCTTTCC CTTCCCCCCT
CTGCTTCAAC CGTGGTT

SEO ID NO:1685: (Length of Sequence = 429 Nucleotides)

 TGAGAGAATA AATGGGTAAT GGGAGGAGAA CTATTITAAC AAGGGTCCTG GGTTTCTCTT TGCAAACACA GTAGGCTTAA ACTTTGCCTG CTTTTTAAAA TGGCATTTT

SEQ ID NO:1686: (Length of Sequence = 445 Nucleotides)

TGICTICATA ATATAACAAC ACTAATACAC TAATAGIAAG ATTAAGITAG GCAGTCTTCT ACCAAATGIG TAATAGAGAT
TGCCICAAAA TIGIGICCAC ATAATCCACG CICATCITGC AAAGCGCIAT TICAGGCACI TITITITIGAG ÀAAGAGICTC
ATTCTGICGC CCAGGCTGGA GIGCAGTGGC GCAATCITGG CICACAGIAA CCTCTGCCTC CCGGGTTCAA GCGATTCCCC
CGCCTCAGCC TCCCGACTAG CIGGGACCAC AGGCACGNAC CACCACGNAC GGCTCACCTT TGIATTITIA AGTAGAGATG
CGGGCCTCAC CATATTGGGT CAGGCTGGGT CITCAATCIN CCTGGACCTC ATGNTCCACC CGCCTTGGGC CINCCAAAAG
TGCTTGGGGA TIANAGGGAA TNGGGCCACC GGGGCTTGGG CCAAT

SEO ID NO:1687: (Length of Sequence = 170 Nucleotides)

AAAAACCAAA TAAAGCAATA ACTITAAAGA CCICAGACAC ACACAGTATA AACACCIGGG TAAGGITTIN TCCGIGICCA TGITGACACC GGAACTACCG TTAAAGIGCA AGIITTGITT TGIGITCCIT TGIGCAGIIT CACTCACATG TAAACAAGIC ACTIGGCTAT

SEQ ID NO:1688: (Length of Sequence = 386 Nucleotides)

AATGIGATIT GATGITAACA CTAGAGAATG ATGACTGIAG AACATTTGAG CAAGTAAAAT AGTAAAGCAC ATAGTGAGTG
TATGICCATC TAACTGGIAC ATTGATAATT TAGTITTGGGC ACATAAAAGG AATATTTATA TGGCTTCCCA AATGCAGAGT
TACATCTTAT TCGTGTATTT CTCTGAGTAT TTATATCCCG TCTCCTTTTT TCATTCTTAA AAATAAATGA ATTTTCACTG
TTGGCACATA TGAGGCTTAA ATATAAGGAG CATAACACTT GCATTCTAAT TTTTGCATAT ATTGTAAATG TGCTGGTAT
TTACAGCAAA ATACTGTGTA TCCTTTATGG GTAAACAAAG TGACATTGCA TGCATGTAAT GTGATG

SEQ ID NO:1689: (Length of Sequence = 400 Nucleotides)

CTTCTGTCGG ATCAGCGTAT TCCTAGATTA GGAATTCAAA TTAATGAAAA TTCACATATG AAAGGAAAAT CCATTGCTAT
TTCTGGAGAG GACCTCAGTC CTGGGCTTTT CCCTGGCATT GCTACCTGGG TGGGTGCTCA CCACTCAGGT GCTGGTGTTG
GAAGGCAGGA GGAGGAACCT GAAATCCTGC CGATTAAGGC TAATTAACAG GGTTTAGGTG CCTAATTATC ATGACTCAGC
CCGGGACTTA TGGTTAGCCG TGCAGGCCAG GTGAGTCTCT TATGGACTTC CTCTCAGACT GCTCTTTCTC ATTTTGTCCT
GATGAGATAT TGACAGTCAT GTCCACCCGC TTCCTCATCC ATTTCCCCTC TTTGGGCCCCT GGGAAGTACG GGGGCCTCTG

SEQ ID NO:1690: (Length of Sequence = 337 Nucleotides)

AGINATATAC CITTAAAAGT AACTAATGCA ACTGCCAAAN AGGGACAGTG TCAATATCAT TGINTTCATT AGAAGGACGG
CTGCCCCACA CIGINAGAAC ACTGCTGTTC CTAACAGTAG TTTACTTINA GAGGGATGIN AGAATTAGTT TNACCTTAAT
TCCAGATGTG CATGCCTCAA AAGAAAAAATC CCATTCTCCT TCCTTTTGGG GAGCACTTTT GGTGGCACCA AGGCTGGTGT
GGGGTAGTGG AGAGAGCACT GAGCTTAGAG TCACAACCAG ATGAAACTGC TCTGGTCTTC ACTAGCTGTG TGACTTGGGC
AAGCAGCTTG CAGTCTC

SEQ ID NO:1691: (Length of Sequence = 372 Nucleotides)

TCATTCTCCC AAAGTGCTGG GATTATAGGC GTGAGCACGT GCGCCCAGCC TTACTTATTT TTAAATCAGA TTTTTTAATC
AACTAAAACA GCTATGAGTT AAGTACCTGC CCTGCAAAAA TTTTTAGAAA AAGTTTTAGG ATTATGAAAT TAAGAATTAT
TTTCCTTAAC TGGAACAGTT CTAAAATTTA TCTGATACTT CTCTAACAAG TGAGTGATCT CATGTAACCC CAGTTTGTAT

CTTAAAGGCT GCAGCATAGA ATTGAGCTGT ATAACAGTGT TAGAACTGTC AAGTGATAAT CACAGAACAG TTTGTATCGG TTTTATAATT CTCATGTCTT GATCAGATCT GAAGGGAATA GGCATACCCT CC

# SEQ ID NO:1692: (Length of Sequence = 360 Nucleotides)

TTTTTTTGGC AAAAATAGTA TATATTTATT ATGIACAACA TGIATTTGA GATATGIATA CATTGIGGAA TGICTAAATT
GAGCTAACAA ATACATTATC TCACATACCA TGITTTTTG TGGIGACAAC ATCTACACAAT ATAGACCATT TCACAAATTT
GCATGITATC TITGIGCAGG GGCTATGCCA ATCTTCTCT TATTTTTNCA ATCTTGGTG ATGIGCTGCT GAAGCACACA
CCCTAATTCC TITCATTTAA GGNICTAGTT AACCTTTCTC TTAAGTATAA CCATGIATTT TGITAAGCAA TATCTTTTTA
TTACAAAAAAT GCCATTTTTT TCTGGNIAGG AAAATTGATT

# SEO ID NO:1693: (Length of Sequence = 378 Nucleotides)

GACAAAAAGA GGGGTCIGGC TGCCGATGIG GAAATTIGIT TIGIGGACIT CACCGITACI CIGACAAGCA CAACIGICCG
TATGATTACA AAGCAGAAGC TGCAGCAAAA ATCAGAAAAG AGAATCCAGI TGITGIGGCI GAAAAAAATTC AGAGAATATA
AATTACTICT TGIGAAGAGA CIGAAACITT GITITTATIT TAATATATCG TAGGAAAACA TTAAAGAGCA GATGCATGGC
CATTITNCTT TGATGITCIC CAGAGITTTA CATTACACIT GICIGICTTA TAATIGATAT TITAGGGATG TITGGGIGIT
TGITACAGGC AGAATTGGAT AGATACAGCC CIACAAATGT ATATGCCCTC CCCTGAAA

### SEQ ID NO:1694: (Length of Sequence = 362 Nucleotides)

AATGCACTTT ATTGCCTCCC AGGGAGTGGG ATGCAGGATC AGAGTGGACA CGCGCAGGGG GCTGGTGTGG GGAGCAAAGC NCCGGGCCTG CCCCGGACCC TGGTTTCCCT GAGGACCAAC GTGAATGGGG GCCCCACTGG AAAGATGCTT GGGGCTGCAG AGGGATGGA ATGCAGGCCC AGGTTGCTGG GTGGTGCCCT CAGCTCCTGG CAGGGTTGAC GGGTGGTGGC CGCTGGGCTC TGCCAGCCGA TGGTCCNCTG GCACCTGATC CTGTCTTCCA GCTTCACTTC CGGGCCTGCT CGTAGTTGTC AGTGAACCAA GCACAGGTCT CCTTGACCGA CTGCTTTNAA GGGTGTGAAN CG

# SEO ID NO:1695: (Length of Sequence = 411 Nucleotides)

TTAATACAAG GGGTTTGAAC TGGACATCCT AATGATGCAA TTACGTCATC ACCCAGCTGA TTCCGGGTGG TTGGCAAACT
CATCGTGTCT GTCCTGAGAG GCTCCACAAT GCCCACCCGC ATCGCCATTC TGTAGTCTTC AGGGTCAGCT GTTGATAAAG
GGGCAGGCTT GCGTTATTGG CCTAGATTTT GCTGCAGATT AAATCCTTTG AGGATTCTCT TCTCTTTTAC CATTTTACTG
CGTGCTCCACCC CTTGTCTCT CTCTCTCTAG CTTTTTAATT CATGAATATT TTCGTGTCTG TCTCTCTCTC TCTCTGTGTT
TCCCTCCAGCC CTTGTCTCG AGACGGTGTT TTCCTCCCTT GCCCATTATC TTTTCAACTC CCAGGGCTAC CCATTTCAAT
GGTGGGTCGT T

# SEO ID NO:1696: (Length of Sequence = 280 Nucleotides)

CTTTGTGATG TTTTTACGCT TTACAAAAAG CAGATTTGGT ATTCAGAAAA GCCTGCAAAT ACAACATTGC TTAAGAGAAC CTGTAAAACAC GTTTGGAATA CAATGCAACA CAAGTCAGCA AGGACAGGGG TAGGTCCAAA GGAGCCAGCT AGGGGGAAAG GTGACAGAAA AGGAGAGGGA AGGATGCAGA CAGACATCAC CTGTGGTCTC TAAGGGGGCC NTGTGTTTAA TTTATAAGGT TINCTNCCCA CAGGAGTTCT NNTGTGATCT ATCCGTTCAT

# SEO ID NO:1697: (Length of Sequence = 418 Nucleotides)

ATTICITCAT TIACAAGAGG AATATATITG GCTTCTCTCT TAAGACTCTG AGATTCACAA TCAGCAGCTC TAAAAAATAA AGGAGCAGTT TGGCTTCCGG AAGGAAGAGG AGGCAACACT CGGACCTGGT TCTTGTACAA CAAGAAAAACA TCGCTGGGGC CCCGCTGAGG CTGGAGTGGG GGTGGAGGCT GGTCTTTGGA GGCCCTCGGG

GIACOCCAGA GCTINGIGGG IGAGIATICC ACCIGCITAC ACACCACIGA AGCCACAGCC AGCCAGIAAC IAAGGGGCAA GAAAGAGCAI IGICCAAGCI GGCICITING GGGGGICCCC CATINGGCCA CAAAGGCCIC ACCCCCCACC CCATCCCCGI AACCAGAAAC CACCIIGA

# SEO ID NO:1698: (Length of Sequence = 376 Nucleotides)

ATTITIATIG TITATITACI TATTITITAC CCTTITITCA AGAGATGGGG TCTCACAGTG TTGCCCAGGC TGGACTTGAA
CTCCCACTCC TGGGCTCCAG CAGTCCTCCT GCCTCACCTT TCCAAGTAGC TGGGGCTATA AGTACACACC ACCATGCCCA
GCAATATTT AATTICTGTA ATGIGTCATT TAGCCAGTGA TTGTTGTATT ATAATAGAAT CACAGAAATG GAGGGACTCC
TAGAGGTAAT CAAATCTGGT GGTTTTAAG CCTTTTATTC CCTCTAAAGG GATAGTAAAA CCATTAAAAA TATAATTTTT
CCCAATTATG TAAGCCAGTG AAAGCTGACC TYCTGGTTTA GAGAGGAACA CAGATG

# SEO ID NO:1699: (Length of Sequence = 365 Nucleotides)

GGIACATGIG CACAACGING GNGITTGITA CATATGIATA CATATGCCAT GITAGIGIGC TGCACCCATT AACTCGTCAT
TTAGCATTAG GIATATCTCC TAATGCIATC CCTCCTCCCT CCCCCTACGC CACAACAGIC CCTGGIGIGT GATGITCCCC
TTCCTGTGIC CATGIGITCT CATTATTCAA TTCCCACCTA CGAGIGAGAA CATGCIGIGT TTGGTTTTTT GICCTIGCGA
TAGCCAGATG CAGCTACTCT TAATGIGCAT ATTTTCATCC TAGAACATTG GAGAGITCCT GIAAAAGCCT TGTGTTCCAG
GAGGAAGGAG ATCCTGACCC TTCTGCTGAT GGCAGCAGIC AGGGG

# SEO ID NO:1700: (Length of Sequence = 397 Nucleotides)

AAAGGCAGTC AAGCAGGAGT TAAACAATAT GGACCTAACT CTCCTTATAT GAGAACATTA TTAAATTCCA TTGCTCATGG
AAATAGACTT ATTTCTTATG ATTGGGAAAT TCTGGCTAAA TCTTCCCTTT CACCCTCTCA GTATCTCCAG TTTAAAACCT
GGTGGATTGA TGGGGTACAA GAACAGGTAC GAAAAAATCA GGCTACTAAT CCTGTTGCTT ATATAGATGA AGACCAATTG
CTAGGAAGAG GTCCAAACTG GGACACTATT AACCAACAAT CAGTAATGAA AATGAGGCTA TTGAACAACT ATAAGACGTA
TTTGCCTCAG GGGCCTGGGA AAACATTCAG GACCCAGGGA ACCTCATGCC CTTCTTTTAG GTTCAATCAG ACAACGT

# SEQ ID NO:1701: (Length of Sequence = 245 Nucleotides)

GICTAGGAGG AGGCCTTCTG CACAGAGCCC CTGAAGAACA CAGGCAGAGG CCCCCCACTT GGCTTCTACC ACGTCCAGAA CATCGCAGTG GAGGTGACCA AGTCCTTCAT TGAGTACATC AAGAGCCAGC CCATTGTTTT CNAGGTCTTT GGCCACTACC AGCAGCACCC GTTCCCCANCC CTCTGCAAGG ACGTGCTCAG CCCCCTNAGG CCCTCGCGCC GTCACTTCCC TCGGGTCATG CCACT

# SEO ID NO:1702: (Length of Sequence = 349 Nucleotides)

# SEO ID NO:1703: (Length of Sequence = 419 Nucleotides)

GAGCCCCTGC CCTCCAGAAG CTCACATCCT CCTACTCATG GCAGACAAAT AAACGTGAAT TACACTGCAG GGAGGTAAGT GTGGCAGCAG ATGTAGTATG CAGTGCAGAG GTGGCCATGG TTGCNAGGGC AAGGAGGGCT TCCTAGCATG GGCGTTATTT GACCAGAGGC TGGCGGTGGC TTTTGCTAGC AGTGTGATTG TNATCTGAGC CAGGGACAGA TACCTCINTG AGCCTTGGTT TCCTCATCTG TAAAGTGGTT AAAGACTGAN TAAAGCAAAA TATGTGCAAA CAGTCTGTGA ATGGGGAAGT AACAGATGTT GCTTTCTATT ATGTTCTCTC CTAGCCATGA ATATCAATTA TTTCAGAAAT GAAAAGGGAT CCTGCACCCA ATTTCAAATC AAGCAAGTTC ACCTAGAGG

#### SEQ ID NO:1704: (Length of Sequence = 372 Nucleotides)

GCTTCCCGAA GGTCTTGGAC GAGCGCTCTA GCTCTGTGGG AAGGTTTTGG GCTCTCTGGC TCGGATTTTG CAATTTCTCC
CTGGGGACTG CCGTGGAGCC GCATCCACTG TGGATTATAA TTGCAACATG ACGCTGGAAG AGCTCGTGGC GTGCGACAAC
GCGGCGCAGA AGATGCAGAC GGTGACCGCC GCGGTGGAGG AGCTTTTGGT GGCCGCTCAG CGCCAGGNTC GCCTCACAGT
GGGGGTGTAC GAGTCGGCCA AGTTGATGAA TGTGGACCCA GACAGCGTGG TCCTCTGCCT CTTGGCCATT AACGAGGAGG
AGGAGGATGA CATCGCCCTG CAAATCCACT TCAACGTTCA TCCCAGTCCT TC

#### SEO ID NO:1705: (Length of Sequence = 426 Nucleotides)

GATGCCTTAT TTAGTCCATT TGGTGAGGTA ATGITITCTT GGATGTCCTT GATGCTTGTA GACATITGTT GATACCTGGG
CATTAAAGNG TTAGGTATTT ATTCCAGTCT TCACAGTATA GGCTTGTTTT TAGCCATCCT TTTTGAGAGG ACTTTCCAAG
AATTCAAAAG GGATTGAGTG TTGTGACCTA AGCCTATGGT CACTGCAGCC ATTTCAGCAC TAGAGAGTGC CCTAAGCCCC
GGAATGCTGC AACTCTTACA GACTCCTTGA TACACAGCTT TGGTAGATTT TGGGAAAATA AGGGAGAATT CCCTGGGGTT
ACCAGGTAAA AAGTCTCTCC CACTTCCCTC TCTTTCTGGC AAAGGAAGTC AGTCTCTGCA CCAGGCTGCC TGGAGTTTGG
GGGAGGGATA AGGCGGTCAC TCTAAT

#### SEO ID NO:1706: (Length of Sequence = 412 Nucleotides)

ATTITATITO CITACATOGA AGAAAATGIT AAAGAGTATO INCAGACACA TIGGGAAGAA GAGGAGIGCO AGCAGGATGI CAGICITITIG AGGAAACAGG CIGAAGAGGA CGCCCACCIG GATGGGGCIG TICCITATCCC TGCAGCATCI GGGAATGGAG TGGATGATCI GCAACAGATG ATCCAGGCCG TGGTAGATAA TGTGTGCTGG CAGATGTCCC TGGNICGAAA GACCACTGCA CTCAAACAGC TGCAGGGCCA CATGTGGAGG GCGGCATTCA CAGCTGGGCG CATGAAAGCA GAGTTCTITIG CAGATGTAGT TCCAGCAGTC AGGAAGTGGA GAGAGGCCCG AATNAAGGTG TACATCTATT CCTCAGGGAG TGTTGAGGCA CAGAAACTGT TATTCGGGCA IT

#### SEO ID NO:1707: (Length of Sequence = 434 Nucleotides)

GIGIGICICC AAAAAAAAA AAGATTCTAG GCATGGIGGI GTGITGACTG TAGTTCCAGC TACTCCAGAG GCTGAGGIGG
GAGGATTGGI TGAGCCTGGG TGGATGAGGC TGCAGTGACC CATGATCATG CATGGGAGAC AGAGCAAGAC CTTGTCTCAA
GAAAGGAAAG AAATCACTGG CTCTTCTGTA AAAAATGATC TGTTAAGAGT AATTGAAAAA ATAAATACAA GTAATAAAAT
AATCTTTCAT TTAAGAAATA CTACCAAAAT TAACATGGAG ATCTAGCAAA AAGTCAAAAG CAGCTNGGCG TGGTGGCTCA
CACCTGTAAT CCCTACACCT TGGGGAGGCT GAGGCGGAG GNTCGCCTGA GGTCAGGAGT TCGAGACCAG CCTGGCCAAC
AGAGCCAAGT CTCTACTTAA ATACAGATTA GCTT

# SEQ ID NO:1708: (Length of Sequence = 440 Nucleotides)

GGACCAGGAC TCCAGCACCT TCCCTGGCTG CATCAACAAT GCCACACTCT TTCAAGATGA GATAAACTGG CGCCTCAAGG
AGGGACTGGT GGAAGGCGAG GATTATGTGC TGCTCCCAGC AGGTGCTTGG CATTACCTGG TCAGCTGGTA TGGTCTAGAG
CATGGCCAGC CACCCATTGA ACGCAAGGTC ATAGAGCTGC CCAACATCCA GAAGGTCGAA GTGTACCCAG TAGAACTGCT
GCTTGTCCGG CACAATGATT TGGGCAAATC TCACACTGTT CAGTTCAGCC ATACCGATTC TATTGGCCTA GTATTGCGCA
CAGCTCGGGA GCGGTTTCTG GTGGAGCCCC AGGANGACAC TCGGCTTTGG GCCAAGGACT CAGAAGGCTC TTTGGATAGG
TTCGTATGAC ACACACATCA CGGTTCTCGA TGCGGCCCTT

SEQ ID NO:1709: (Length of Sequence = 404 Nucleotides)

TTTGTCTTAT GTAGAATTGC CTATAGTAAG AAAACCCAGT AGAGAAAGTG GTTTINAGAC CATTCGGCAG CTGCTTTGGA
CACCTGGAGC CATTTCTTT ACAGATGAAG ATGCATTGTG TCATTGTCTC AGGATCCTCG TCCTGTTGCT TCTCTGGCCA
CAAATTGTTC TTTACCCAAAG ATGATTTTAT TTCACTGTCT TTGAAAATCA TTCTTTATAG GTAGAATATG AAGATTCTCT
GAAAATGATTC CAAAATGCCA AACTCAAACA CTATTGTCCG ATTTCTTTAC TTGCAACAAG AGAGTAGAAG GGACAGTATT
TGTTTTGTGA TGTTGGGGCG TTCATCAGGG AGAGAATTTG AGATAAGTAG GAATAGCCAA TAGGAATAGT GAAATAACCT
AGAT

SEO ID NO:1710: (Length of Sequence = 187 Nucleotides)

GETGATCTGC CGACCAGAGG CCTTAAACTC TGGTGTTGAG TACTACTGGG ACCAGCTGAA CGAGACGGTC TTCACTGTCC
ATTCCAACAG CAGGAGCAGC GAGCGSCTGG ACCAGGCAGA GCACATGGAG GACAGCAGAG ACATGGGCTG ATGAATGCAT
TGGGCTTCAG CCGACCTGCA CTCAGTG

SEO ID NO:1711: (Length of Sequence = 313 Nucleotides)

AGGGCATGT NATCATTINA ATGATGINAT CITTGGTGTT TCCCTCATTA GCTGTAGACT ATCCCCTCTC CTCCCACCAC
AATGITTCTA TGATGAGTTA CAAACAGAAA GGAAATCACA TTTTCATACT AAAAACAAAA TGATCAGAGC CTTGATTTCT
CCACTAGAAA CTACACGTAC AGTTAAGAGT CCACATGCAA CACCTTAAAT CACAGACTGA GGACCTCACA TTCTGACCTG
GGAGTCTCCT CCCCTTCCCC AGCCTTGGGC TAGCTTTGGC CTAGGCTCAG GTAATACTGA CACCCACAGG CGT

SEO ID NO:1712: (Length of Sequence = 202 Nucleotides)

TTTTGGTGGT TTCCTCTTTA TTGTGTGCCT CCTACCTTCC CCCACAATTT CAGTCCCTTC CAACACCCCA AAAAGAAGGA
GTGAAAGGAA GGGATTGCTG GGGTTCTGAG CCCTTGGCAG TCAGAAGGAC AGAACCAAAC ATCACTGGAT GTGACACAGC
TGCATCAAGA AGTCTACAGC AGTATGGGAA GCGGCAGAGA AG

SEQ ID NO:1713: (Length of Sequence = 253 Nucleotides)

TGATTCANTG GGTCTGGGAT AGAGTCTGGT ATTCTGCATT TCTGACTAGC CTCCAGGTGA TACTGATTCT CCTCATCTAG
GGACCTCGCT TTGAGTAGCA AGTGTTTAGG CCACTTACTA GCAGGAACTA AGCACAGTAT CCTACAACAG CAAATGTCTT
TCCAACAAGA AAGACGAGAG CAAATNCTGA TGCCACATCT GCACTGCCTC AGAAAATAAA GAAGGGATGA GGAGCCCCCC
AGTGGCACTC TGT

SEO ID NO:1714: (Length of Sequence = 299 Nucleotides)

GGIGCAGCIG CITTGAAAAA TGACITGGCA GCACCICAAA ATGITAAACA GAGITACCAC ATGACCCAGT AATTICACAC
TTAAGGATAT ACTCAAGAGA AATGAAAACT AAAAACATAC GGCTACCCAA AAACTTACAT AAGANIGITC ACAGCAACAT
TATTCATAAT AACCAAAATA TGGNAACAAC CACAATGICC ATCAATTGAT AAMIGGGTAA AGTCIGGCAA ACTCACAGRA
TGGRATATTA TITTGGTGGTA AAAAGGAGTA AAGAACTSNI ATGIACIACA ACATGGGTG

SEO ID NO:1715: (Length of Sequence = 371 Nucleotides)

TTTTTTTTAC CEGEGEGTTC CTGAGTTTAT TTGGGGCACA CCCGGACGAG GGCCCTGCAC CTAGAAGAAG GTGTTGGGCC
TCTTGGTGGT GAAGCGTGGC TTGTGCTGAC GGCGCAGGAC CCGGTGGGGC AGCGGGAACT TGATCTTGGA GTCGTGGAAC
TGCTTGACAG CCGGCCGGGG GCACTTGCTG GCCGCGATCT CCTCCACCTT CATGATCTGA ATGGAGTGGG CTCGGGGCGCG

GTGCCGGGCA CCCATGTCTC GGTAGCACTG GGTGACAGCG CCTGCGGTGG TCAAGTCCCG GTATTCCCGG TACATGTTGT
GGGTGCCGCT CCGGGAGTCA TAGCGCAGCA AGATCCCGAA GTTCTTCAAC C

SEO ID NO:1716: (Length of Sequence = 265 Nucleotides)

GTGCAGAATC TECTCCTGGA CACCCACAGG GGGCTGCTGT ATGCGGCCTC ANANTCGGGC GTAGTCCAGG NGCCCATGGC CAACTGCAGC CTGTACAGGA GCTGTGGGGA CTGCCTCCTC GCCCGGAACC CCTACTGTGC TTKGAGCGGC TCCAGCTGCA AGCACGTCAG CCTCACCTTG CCACCAGGGC GTGGATCCAG GACATTGAGG GAGCCAGCGN CAAGGACCTT TNCAGCGCGT CTTCGGTTGT TTCCC

SEO ID NO:1717: (Length of Sequence = 350 Nucleotides)

CAGCCCCCCC AGCCCTCTG CCCCTCCAT CTCTTGTCCG TTCCCACCCA CCCCCTCCT CGGCCCGAGC CTTTTCCCGG
TGGGTGTCAG GNTCACTCCC ACTAGGGACT CTGCGCTAAT TACCTGAGCG ACCAGGACTA CATTTCCCAA GAGGCTCTGC
TCCAGGAGTC CAGGAAAGAC GAGGCACCTT GGCCGGGGG CCTGCTGGGA CTTGTAGTTG CCTAGACAGG GCACCACCCT
GCACTTCCGG ACCCGCGCTG GAGGCGCCGT GAGGTTTGGT GTCTCGAAGC AGCAATTAAA AAGCAAGAGG ACTTCATGAC
CACCATGGAC GSCAATTAGG AGAAGATCAA

SEQ ID NO:1718: (Length of Sequence = 379 Nucleotides)

GACATOGAGA CTCACATOGC TOCAGAACAC TOTCAGOTGA CCTGCAAATG TAACAAGAAG TTGGAGAAGA GGCTGITAAA
GAAGCATGAG GAGACTGAGT GCCCTTTGCG GCTTGCTGTC TGCCAGCACT GTGATTTAGA ACTITCCATT CTCAAACTGA
AGGAACATGA AGATTATTGT GGTGCCCGGA CGGAACTATG TGGCAACTGT GGTCGCAATG TCCTTGTGAA AGATCTGAAG
ACTCACCCTG AAGTTTGTGG GAGAGAGGGG GAGGAAAAGA GAAATGAGGT TGCCATACCT CCTAATGCAT ATGGATGAAT
CTTNGGGTCA GGATGGAATC TGGATTGCAT CCCAACTCCT CAGACAAATT GAGGGCTCT

SEO ID NO:1719: (Length of Sequence = 197 Nucleotides)

CCTATATTE TITAATITAT TIAAGACCAC CTCCTTACAA CTTCCAGAGA GAAAATACAA AACAAGAAAC AGACTTGGTT
TCAAATGCAT AACCAGGTGC TGGAGTTTAA AGCATTACTG ATAACATTGT TACAGAAGAA TGGCAGCTTA CTCCAGGGCA
CTTCAGTATT CCTGAGGAAT AAACATGATT TCGGAAG

SEQ ID NO:1720: (Length of Sequence = 203 Nucleotides)

GAGGGCGGG CAGAGGAGA ATGACGGGGA GAGTGAGGAG GAAAGAGGAA AGGAAGGCCA GGGTGGGAGG AAGGATCANC TAAATCTGAG GGAAGAAGAA GGAAAGGAGA GGGCCTATTT CATAGCAGAT GCAAATRAAG GGNCTTGGGG CTAKTCAGGA AGAAAGGGAA AGGGAAGGAA GGCAAGAGAG AGGGGTGAAG GGA

<u>SEO ID NO:1721:</u> (Length of Sequence = 326 Nucleotides)

GGTGCAGCGA TGTTTAATGG CAATTCGTAT AAACCAAGCC CATGCACAAG TAGAAAGTGC CCGTGGAGCC GGCAGGAGGC
CCCCGCCGCG NTAGAGAACC ACAAGCCCGG CCGTGCAGCC CTCCCCGCGG CGCCTTAAAT AGATTCTTCA CTATACTCTG
TATGTTACAG TATGTACAAG ACCCCTCCCC TCGGGGGACG GGGCGGACTN CGCAACGNGT TCCTATGTAC ACCACCTCCC
CTTTCGGCCC TGAGGTCAGT GGCCAGAGTC GGGTGATGGG GTAAGANAGG GCCAGAGAGG GAGGAAACAG ACGCAAACAT .
GCGGAG

SEO ID NO:1722: (Length of Sequence = 291 Nucleotides)

TGITTTTAAA AATGAGAAAA TITGGAGAGA GAATACTATT ATGTCAACGG TACAAGACTC TGAATCTTGA AGATGTAGAT GGATATAATA TITAGACTIT ATATACACCC ATAGATATGT ATTTATATAT GCATACGTTT TGTATAAATT TACAATTGAC TTTTTGTATT CICTTINCTG TCATTACAAG AATGAGATGG AAACCAAAAT AGTTGTNCCA TCCTCTTACC CAAAGAGGGA TACTGAAAAG TCCGGTATGT GCATGCACTT GTTTCTCTGG GGTCAAATCT G

SEQ ID NO:1723: (Length of Sequence = 369 Nucleotides)

GATTGCCCGC TCCCTCGATT CCTTCCTGTT GTCTCCAGAA GCTGCTGTGG GCTTGCTAAA AGGGACAGCA CTTGTCCTAG
CCCGATTACC TTTGGATAAG ATTACCGAAT GTCTTAGTGA ACTATGTTCT GTTCAGGTTA TGGCATTGAA AAAGCTGTTG
TCTCAAGAGC CCAGCAATGG CATATCCTCA GATCCCACAG TGTTCTTAGA TCGCCTTGCA GTGATATTTA CGCATACCAA
TCCCATTGTG GAAAATGGAC AGACTCATCC GTGTCAGAAA GTCATACAGG AAATATNGCC AGTTTTTATC CGAGGACTCT
AAAATAAGCA CCGAGCTGNA TAATCGGATT GTAGAGCGTT GTTTGCAGG

SEO ID NO:1724: (Length of Sequence = 231 Nucleotides)

ATGIATIGIT AGITCGATTC CITCAAATTT TATACATATT TACITTCIGI TAAAGAGAAA AGGATAAAAT GGIATAAAAA AAGATAAAGC TATTAATTAA GCACGAGAGA GAAGATAAAT GGATATTTC CCIGIGIGAG GCTAAGACAG AWGCAAATCT CGITANGAAA AATGCCACCC ACACAACAGG AANTTTATCC AAAACAAAAC AAAAGCAGIT ATAGANCCCC T

SEO ID NO:1725: (Length of Sequence = 317 Nucleotides)

GIGCAGGGIA GGGIACATAT GGCTCTGICA GAAGAATACC ATGATTTAAG GGAAGAAAGT ACACAAGGIA CATGGAGGGT
ACACAGGGAA AGTACAT A TAAACATGGA CGTGTGCAAA TAGGAAAGAC ATGACTCAGC ATGCTAGACA AATTGCACAT
GCCTACCCAA ACACGT A GGGCAGACCC ATGACCATGA GAGGGGCACA CGTAGCTGTG AATGCAGGGC ACCCGAGAGC
ACATGTKACT KAACATGAAG AAAGCATACG GGAAAAGCGT GTKTACACAT GAGCATGTTC AGTGGGGCAC ACGCAGG

SEO ID NO:1726: (Length of Sequence = 282 Nucleotides)

CTCTTGAACC AGATGAGCAG CCACCGGAAA CAGAAGCAGA GAGAGCCGGA GTCCTGGGAA TCCAGGAAGT CGCAGAGCAG GGGGTCCAGC ACCCTCAGGA GCAGCAGCAG TCGCCCGAKT TGCCGCTTCA TGGTCTCCTG GCTCTCTTCA AAGTTCCCTT GCACGAGCTC CATGAAGCCC CAGAAACACC AGAAAGCATC CACCTCGTTC TGAATGACGT AGAGGATCGG GGAGAGAAGA TCACTCATGC CCTGGACGTA GCCGAGGTCG AAGTGATACA TT

SEO ID NO:1727: (Length of Sequence = 285 Nucleotides)

GAGIATIGAT TICAGGCAGG ACCCAGGTCC CAAAATGITA GAAACAGITA TCCITTITCC CTCTGAGITC GITATTCTCT
GGGGCCCCAG TATCCGTGGC TIAACAACCC GGCTGGATAG AAGGCACCTC TITCCCCACG TTCCAACAAG ATCCCAGAGC
TGCTTCTCAT TGGCTCGTCC CTGAGTCAGT CACACTGGAC CGGAAGGTGA AAGGCCCTCA TTGGCCAGNC CCGAGTCATG
TGCCCACCCC TGGGGATCCA GCTGTGGGNC TNCTTTAACA GCATT

SEO ID NO:1728: (Length of Sequence = 394 Nucleotides)

TITTITEAT GAGGAGATAT AGCAAAGGGT CATTIGCCCC TCCTTCAGAA AACITTICIC CAAATCICCT TIAAACATAC
TGCCTTATCT TICCCTCCAT AACICCACCA GICTCTCCAC ATCCCCCTCC AAATCICTGT ATACATAGGC AAGAGAGGGC
GATTCCCAGC ACAAGTCIAG TCCTGGGCGA AACITCCATC TCTTTCCTCG CATACCTCCT GICTGGGTAT GGGGATAAGG
GAGAGTATGG GATTITGTTC TCCATTACAT GCTITTTCAA AATTTCTGTA ATATGTGGCA CTTATAAAAT CAGAACAGAC
AAAATGATAT CGGGTAAAAC ATGCAACTGA GAGCAATTTG GGGAAAAAATC CTCAGGNCAC AAAATGTATT ACTG

SEO ID NO:1729: (Length of Sequence = 301 Nucleotides)

GGAAGTTAAA GTATTTATTG ATGTGTTTAA ACTGTGTACA TTCTCCACAG ATCATATTAA GGNGTTTKTA GGKGAAGTTT
AATCTGTGCA TAGTGGGTAG YGACATGAWT AGGGTCAAAG GGGAGGYAAA AGGAAAAAAA CAAAACAAAA ACAGTCACAG
GAAAWTAAAA ATACACCMCA GGTTACCAGA ACCTTCAGGT TTAAAATAAA ANCNAAGNAA AAGCAGAAGC AGTGAGCATC
GGCATCAACC TGTACAAGCA TTACAAAAGG CTCCTGTGAC GGAAACACAA TTGTTCAAAG G

SEO ID NO:1730: (Length of Sequence = 312 Nucleotides)

GACERACECT CITECCACEC CCTEASCEIG TACACATEAT SINITCIAIG CATTCACCCT GCCCCCCAGC CCGCCCTECA GAGGACAAGA TOGGTGGCCC CGGCTCCCTT TCCCCTAACC GCCCCTGCCC GCTGTGCAGC CGTGTGCGTT GCCGTGGTT TCTGTGTCAC TGGCGTGTCA CGTGATGTAG CCGTGTTTGC TGACATGAGC CCCTGCCCCC TTCTCTGTTT CTCCGTTGGT TTCTAGAGCT CTCTCCCTCC CCTTCTCAGA GGGGACAGGA CTCCTGGGGT CTGGCTCGGG CCCAGAGCCA GG

SEO ID NO:1731: (Length of Sequence = 392 Nucleotides)

ATCGGCTATG GGITCCGGTG CGTGACAGAG GAGTGCCCGC TGGCAGTCAT CGCTGTGGTG GITCAGTCCA TCGTGGGCTG
CGTCATCGAC TCCTTCATGA TTGGCACCAT CATGGCCAAG ATKGCGCGGC CCAAGAAGGG GGCGCAGACG TTGCTGTTCA
GCCACCACGC GGITATTTCG GTGCGCGACG GCAAGCTCTG CCTCATGTGG CGCGTGGGCA ACCTGCGCAA GAGCCACATT
GTGGACGCCC ACGTGCGGGC CCACCTCATC AAGCCCTACA TGACCCAGGA GGGCGAGTAC CTKNCCCTGG ACCAGCGGGA
CCTCAACGTG GGCTATGACA TCGGCCTTGA CCGCATCTTC CTGGTGTCGC CCATCATCAT TTTNCACGAG AT

SEO ID NO:1732: (Length of Sequence = 352 Nucleotides)

SEO ID NO:1733: (Length of Sequence = 321 Nucleotides)

TTTTTGTT GITGTTGT TIGTTGCAG AGTCTGCTC TIGATCTATC TCCCAGGCTG AAGTACAGTA GTGTGATCTC
GGCTTGCTGC ACCCTCTACC TCCCAGGTTC AAGCAATTCT CATACCTCAG CCTCCTGAGT AGCTAGAACC ATAGGCACAC
GCCACCATAC CTGCTAACTT TNCTATTTTT AGCAGAGACT GGATTTTGCC ATGTTGGCCA GGCTGGTCTC GAACTCCTGG
CCGCAACTGG ATCTGCCCAA CTCAGCCTTC CAAAGTGCTG GGATTACAGG CATAAGCCAT TCATGTGCCG TTKTTCAACT
G

SEQ ID NO:1734: (Length of Sequence = 208 Nucleotides)

AAGICAACGT ATCTATTTT ATTATGAAAC ATTAAATTTT GACACATTGC CTCATTTGCT TTTTTAAAAT CTATTATCTG
ACTTAAACCT ATTCAGCAAA AATGCCAATA AATTATATTA ATCATACTTT GGGTCTTTTT AAAACTAGGA ACATAATATG
TTTTATGATA AACAATAATA CTAAATCTGA GTTGTATGAA CTGTTAAC

<u>SEQ ID NO:1735:</u> (Length of Sequence = 347 Nucleotides)

TCTATTACCT GTACAGTATG GTTTATACGT TGGTGAGTTT CTAAGGGGGA AGCCGGCCAG GGAGCGAGCC CAGAACGGAC CGGACGCCTG TNCACCCCCA GCCCTGCCCC TTGGCCGCAG AGGCCTCAGC CCTGGGGAGG GAGGGGGCAC TGGTGCCCCC AGCCTCTCCA ACCCCCAAAC TGCTGCTGCG GGGAACCCCC CCCACCCCGC CTTCAGAGGCC CTCCCCCTTG GACTAGAGCG GCTGGGCAGA GCTCTAAACA GGGGCAGGG CTCCTCTGCC AGCCTGTGGG CATGGCAGTC ATTCCTGGAA GGGGCAGGAC CTCCGGCCTT GTCCATTTCG GGGGGAA

SEO ID NO:1736: (Length of Sequence = 356 Nucleotides)

GACACAGGGA GGGGAACAAC ACACACTGGG GCCTGTTGGG GAATGGGGGG TGAGGGGAGG GAGAGCATCA GGACAAATAG CTAATGCATG TGGGGCTTAA AACCTAGATG ATGGGCTGGG CGTGGTGGTT CACGCCTATA ATCCCAGCAC TTTGGGAGGG TGAGGCGGGC GGWTCACGAG GTCAGGAGAT CAAGACCATC CTGGCCAACA TGGTGAAACC CCGCCTCTAC TAAAAATACA AAAATTAGCC AGGCATGGTG GTGCGTGCGT GTAATCCCAG CTACTCAAGA GCCTNAGGCA GGAGAATCAC GTGAACCTGG GAATCGGAGG TTGCAGTGAG CCAAGATCAT GCCACT

SEQ\_ID\_NO:1737: (Length of Sequence = 324 Nucleotides)

TGITTICIAA TGATTITIAA TITTICAGAG GAAAATAATI TCAAGAAATA AAACTIAATI CCCCTGAGIC CITATIGAAT
TAAATATIGA AAAACAATGA ATGAATGATG CATICITATI AATGGACIGI AAGAAACTGA TATAATGGAC TICATICTAC
AATTCGGTTT CITATIGICI TACACATGCI CCTCGAACTI AAACATITTA GGACCTTAAC ACCATITCCC TAGTACAATT
ACTAAAAGAA AGCITTGGAT AATATAATAT CAGGGAAGAT AGTACAACAT AGTGAAGGAT GACATAGGGN AGATGTGAGG
AGCA

SEQ ID NO:1738: (Length of Sequence = 316 Nucleotides)

GECACCCTGG GCATGTCCAG CCTGGAGCAG CTGGAGCAGA ACTTGGCAGC AACAGAGGAA GGGCCCCTGG AGCCGGCTGT CGTGGATGCC TTTAATCAAG CCTGGCATTT GGTTGCTCAC GAATGTCCCA ACTACTTCCG CTAGGCCCAT CATGGCTCAG GCTGCCCCAAG GCTTTINTGT CACCTCTTTT GTTCTCTCAC ACTGACCAGT CTTGGCCTTA AGCTGACTTA GAAGGGTTTT TCTGAATTGT CTAGATCCAT GCATTATTTT TCTAGCTTCC TGCCTTGCTC CCTATTCACT TTACACTGTG AAAGGT

SEQ ID NO:1739: (Length of Sequence = 398 Nucleotides)

CAAAAACCAT CICAGGATAC TGAGAAGCCT CTGGAACCTG TGAGTACTGT TCAGGTAGAG CCTGCAGTTA AGACTGTAAA CCAACAGACT ATGGCAGCAC CAGTAGTCAA AGAAGAAAAA CAACCTGAGA AAGTCATCAG CAAAGACCTT GTTATAGAGA GGCCTCGACC AGATTCAAGA CCAGCAGTTA AAAAAGAATC AACTTTGCCT CCCAGGACCT ATTGGAAAGA AGCTAGAGAG AGAGATTGGT TTCCAGATCA AGGATACAGA GGTCGAAGC TATAGAGGTT CTTTATGGGA GGGCCTGGC AATGAGGCT TATAGAGGTT CTTTATGGGA GGGCCTGGC AATGAGCC AATAAGCC

SEO ID NO:1740: (Length of Sequence = 376 Nucleotides)

GAATAAATTC GCAAACTATG CATCTGACAG AGGACTAATA CCCAGAATCT ATAAGGAACT CAAAAAATCA GGAAGAAAAA AAATCCCATC AAAAGTGGGC TAAGGACATG ANTAGACAAT TTTCAAAAGA AGATATGCAA ATGGCCAGAA AGCATATGAA AAAATACTCA ACATCCCTAA TTATTGGGGA AATGCAAATC GAAAACCACAA TGCAATACCA CITTACTCCT GCAAGAATGG CCATAATTTA AAAWTCAAAA AATAATAGAT GTTGGCGTGG GATGTGTTGA AAAGGGAACC ACTITTACAC TGCTAGTGGG GATGNTAAAC TACTTCGGCT ACTATAGNAA ANCAGGATGG GNGGATTCCT TAAAAG

SEQ ID NO:1741: (Length of Sequence = 322 Nucleotides)

CARATGCARA RATCARGACT TGTCATARAN TGTRIGTCCA TAGCCTATAC TGTTTARATT ACINTARCIN TATAGTRAGT CTTGATGTTT RATACAGCAR ATGTTRARCC RAGCTTTCAC TACAGRARATA RACAGRARATT TATAGGCGCT CATTRICCTT TTAGACARAG TTGTRITTGC TTTGCTRTTR TTTTTGTTTR GGNTTKTGC RACTRITTCA CRARCAGGRA CRAWRATATT

TAAATTGITA ATAGAARTIT CCAGITTICI TIAGICICIG GCTACTCCAA GTACTGGITG CTGTGAATGA CCTITTCATG

SEO ID NO:1742: (Length of Sequence = 322 Nucleotides)

CCCCCCAGCC AGGAAAAAAA AAAAAAGCTT TGAGGAATGA GAGAGGTGA GATGGGTCGA AGAAGGTGCT GGGCAGCCAC
GGGCGCCACG CCTCANTGGC CCCAATTGCC GAAGCCGATC TCCTGCTTGT ATCTGTTAGT GAGGATGTTG GCTTTCCGCG
TNAGTTTCGA GAGCACAGTG TGCAGCCCGC GCAGGTGGTA GTGGAACTNC TGTTCCAGGT CTTCTTCGCC GGCGTCCC; 1A
CCCTCCAAGT GGCCCAGGTC CACCAGGATG TCCTTGGGAC TTCCAGGCAC TGCCCTNCTC GNTCCCAAGC CGGTNGGAGG
CG

SEO ID NO:1743: (Length of Sequence = 250 Nucleotides)

ATGGTIAGGG GGCCAACGCA GTCACCGCCG TCCGCAGTCA CAGTCCAGCC ACTGACCGCA GCAGCGCCCT TGCGTAGAGC
CGCTTGCAGC GAGAACACTG AATTGCCAAC GAGCAGGAGA GTCTCAAGGC GCAAGAGGAG GCCAGGGCTC GACCCACAGA
GCACCCTNAG CCATCGCGAG TTTCCGGGGG CCAAAGCCAG GAGAAGCCGG CCATCCCGCA GGNCCGNGTC TTTCAGCGAG
ACGNGAGTTT

SEQ ID NO:1744: (Length of Sequence = 247 Nucleotides)

GATGATIGAG TGITICTITA AAAATAAAAA CCCCACAAAA AAGCCAGAAC ACCCTACCCA ACCCAGCCCA GTGTAACAGG
TTAGCCATTA ACACAGNATA AAGAWGGTCC CAGCCACACA CGTCATTACT CGGCAGAGGG TGTCCAGKCT GGTCGKCCGA
CGTCACAGTG GATGGCCCTG CGTGGCTGGG RCACAGACAG GGNGCAGGCA TGGCACCTTT CGNCACGCAG AGCAAGCATA
GGCTGTA

SEO ID NO:1745: (Length of Sequence = 379 Nucleotides)

TTCTARACCA GITAATAAAT TCATTCCACA AGTATTTACT GATTACCTGC TTGTGCCAGG GACTATTCTC AGGCTGAAGA
AGGTGGGAGG GGAGGGCGGA ACCTGAGGAG CCACCTGAGC CAGCTTTATA TTTCAACCAT GGCTGGCCCA TCTGAGAGCA
TCTCCCCACT CTCGCCAACC TATCGGGGCA TAGCCCCAGG ATGCCCCCAGG GCGGCCCAGG TTAGATGCGT CCCTTTGGCT
TGTCAGTGAT GACATACACC TTAGCTGCTT AGCTGGTGCT NNGCCTGAGG GCAGGGCAGG AAAATCAGAA TAGCATTTGC
TTTCTCTGGG GCAAAAATGG GAAAGTTCAG CGGGNNGCAG CAGGAATCAA GTGGGCATT

SEQ ID NO:1746: (Length of Sequence = 472 Nucleotides)

TTCATGCTGT CCCTTCATTG AATTITAGAA TGATTGAAGA TAGTGGGAAA AGAGGAAATA CCATGGCAGA AAGAAGACAG CTGTTTGCAG AGATGAGGC TCAAGATCTG GNTCGCATCC GACTCTCCAC CTACAGAACA GCATGCAAGC TTAGGTTTGT TCAGAAGAAA TGCAATTTGC ACCTGGTGGA CATATGGAAT GTCATAGAAG CATTGCGGGA AAATGCTCTG AACAACCTGG ACCCAAACAC TGAACTCAAC GTGTCCCGCT TAGAGGCTGT GCTCTCCACT ATTTTTTACC CAGCTCAACA AACGGGNTGN CAACCACTTC ACCAAAATCC ATGTGGAGCA GTCCATCAGA CTNCTNCTTA ACTTNCTGCT TGCAGCGTTT TGATNCCGGA AGGCCCATGGT AAAATTTTCA GTATTTGCTT GTCAAAAANG GGTTTTAGGC NCCATTTGTG TGGGAGGGGA AG

SEQ ID NO:1747: (Length of Sequence = 351 Nucleotides)

AGGATCAGAA TACTITAATA AGATACCAGT GICAAAATAC ATTICCTTAT AAAGITAAGC TCCCATACAG TTATAATGIT GICAGTAGGA ATTCGACAAT ATAATAACGT TCATGAAATC GITACGTIGA CAGGTAGGGT TAATATGAAG CTTCGAATAT TTTCCAGTGT TTTAGTAAAA CTGCAAGGGT AAAATGCCCT TAATGCCAGG GCAACACACA CAGGNAATCA AATACCAGCA

389

TTTACACENC AGIAACCCTT CAAGTTCTGC CACCCTGTGT GGGGGTAATG CCGTGCAGCT AAAAATATGG GTTTTACCNA ACANCCATGG CCTAAGGGGA TTTCTCATAG G

SEO ID NO:1748: (Length of Sequence = 428 Nucleotides)

AATAGCTTCA GCIGATTGGG TGAGTCCTAT TCATGITATA AAAGGTACTC TGCTTTCCTT AACATTCCAT AAATCTTAAT
CACATCTGCA AATACCTTCA CAGCAACATC TAGACTAGTG TTTGACCCAA CAACTGGGCA CAATAGTTTA GCCAGCTTTA
CACATAAAAC ATCATCACAC TATGCTTCTC TTCTGTGTTC TTTTGTTACCA CGTATCTGTT CCATGTGTTT TNCTTTGTAT
ATATCCTATC CTGTCATATC TCTCCTATGG TTTTGTGGAA ACTATAAGCC TTCTGGGGGG TAAAACACTA TATCTTTGTT
CAATTGTTAA TACATCCATAT AGCATATCAT GCCTGGGGGC ATTGGTTAAA CCCCCCATTT AAATACAGCT NGGCAGCAGG
ATTTTAGGCA TTCCGTCATG GTGTGCCA

SEO ID NO:1749: (Length of Sequence = 478 Nucleotides)

GGITTCACCA TGITGGCCAG GITGGTCTCA AACTCCTGAC CICAGGTGAT CCACCTCAGC CICCTAAAGT GCTGGGATTA

AAGGCGTGAG CACNCACACT CACACCTGGC CCTCAACCAT CICTTTCACC TTCTGCTCAT GACAGTTTAC TAGAATTTTT

TTCCCTTGAG ACTGAATGTC AAGTCAAAAA CAATAAAAAA TTGCTAATCA TTACTATGAC TCCAGAGCTA CTTGCTTCTT

TAAAAATTCC TGAANTTATA AAATATAAAG CCAAAGCAAT GAATTTCTAA TGGTGGAATT GTAGACACTG TGGGCCCCCT

GGCCATGTTA TTTTCAGATG GGGCAAGGGG ATATTCCTAA CCTATTTTTA AAATCATGCC AGCCTAGATA ACTATGTGAA

AAAACTATGG GGTGCTTAGC AAAACTATTA CCTAGCACCC CTTTGGCAGT TTTACATTAA AAATCCCTTT ATTAGGTT

SEQ ID NO:1750: (Length of Sequence = 439 Nucleotides)

GACATTITAT TICCAGGITG GCACGIGIAT AAGGCACAGG GGCAAATGGC TITGGGGTCC TGGAACTGGA AATGGAGACA GGIGIGICTC AGGIGICCCT GCCICCACCA CCCCCTAAGI GCACITGAGA CAGGACCAGI GGIGGIGGIT CCAGCCCAGG GICCIGAAGG GINCCACTGG CICTAGGGGA GAGCCATGGG GACAGCTCCC CAGGCGGGAC CCTCTACTCT CCAGCTACCC AGGAGGGACC CINICCTCCT AGGGGGCGAG GCCAGCTCCA AAGIGCTING TGGCTCCCCA GGCTTAAGGG ACCAGNCTGC CAGGGAGGGC TNGGNTCANA GAGAGAATAG TAAGATNAGA CGAGGAGAAG CACCCCACTA GCACGGCGAT TGGANAACAC INTCGGCGGT ACTCGTCATG TGGGTAATTT GCCAANITC

SEO ID NO:1751: (Length of Sequence = 347 Nucleotides)

CTCTATTACT TATGATTACA CCATGGCAAT ATTCCTTTT CACCAGGAGC TTTGGACCTG CSCAGGTTGT GGCATGTAAT CACCAGGAGC ATGTAGTCAT CTGTAGAAAT CACAGGCACA CTCATGTTTG CTCTGGAAGG AATCTGTTTT CCACAATGAC TCCCCCCAGC TAATGTACAC ACTGGCATTT TGCATGCCTT CCTCACACAT GGGGCACCAG CCTTGCTTCA GAACCACCCA AACTCCACAG AGGCCCTTAA ATATGGGCTA GGGACAGATT TTCTTTAAGA AAGAGTTAAG GANGCAGCTT ACAAAGGGAC AAGGCAAATT CCACAAGTCA GGCAGCA

SEQ ID NO:1752: (Length of Sequence = 297 Nucleotides)

GGATATTCTA GCCATACAGA TTCAATGGAA CAGAGAAGAG AAAGGAGGIT CCATTGGCAC CATAGTGAGC CATTCATTTG
CCCAGGGAAG NNGGTGGGGG CTAAGGGGCT AGGITTGGTC CCATGGCTAC ATTAAATGCT TGGCATGACT CCAGGGCTNC
TCTAGTTAGT GGCTCCAGCA CAGTATGAGT TAGGTGAGTT AGGTGTAGGA GTTTGGGGAC AAGGAAAAAG GGAGGAGGGG
TCCCTAGAGG CTNGGTGCCC ATTACATAGA CTCAAATTCG TCAATGCGCT GCTTTAG

SEO ID NO:1753: (Length of Sequence = 402 Nucleotides)

AAATTTAACT TCAACAAGCT GGIGATGCCC AACTACCCAT TCATCAACAT TCGGTCAAGT GGTGTGGTTC CTCAGAGTGC ACCACCAGTG CCAACAGCCT CTTCCCGGTT CCATTTCCCA CCTCTGGACA CCCATTCTCC AACCAATGAT GTGCAGCCGG GACGGTTCTC TGCTAGCTCC CTAACTGCTT CTGGCCAGGA GTCCAGTAAT GGTACTGATA GAAAGACTGA GCTTTCAGAG CTGGAGGGATG GCTCAGCTGC TGACTGGCC CGGGGTGTG ATCCCGTGTC CTCCAGGAAT GCCATTGGTG GAGGAGGGAT TGGCCATCAG AAACGCAAGC CTGACATAAT GCTTCCTCTG TTTGCTAGGC CAGGGATGTA CCCTGACCCC ACAGTCCTTC GT

## SEO ID NO:1754: (Length of Sequence = 397 Nucleotides)

CAGTGGCATC TATGGCTCIA AAATGGAAAG GAGGAGTCCT GGATTCAGGC TACTGACTTA CTCTGTGAAT TTACACATAA CTTCCTTTGA GCCACAGATT TAGCATTCTA CCAGTCACCT GATATTTCTG AGCAGCCACA ATATTTTAAA ACTATATTTA AATCTGAATT TGGATTTAGC AGAATTTTAT TTTTTCCATT TCTATTTTCT ATGGTCACTA AATTGAAATT ACAACCATTG TAAAATTTGA TATCATTAAA TATGTAGGC TTTATCCAGT TTCAAAGTAA AGATGTCTCT AATGTAATTA ATTGTNATTT TCACTGATGA GACTGAAATA CAATCAGTCT GTATTGTGG GTGCGTATGT ATCAGTGGTA AGAGGCTATG ATTAGAC

#### SEO ID NO:1755: (Length of Sequence = 353 Nucleotides)

GAATTACTCT GTTGTTCACC TTTTGCTTTT TGCACTGTTT GINCTCTTAT CTGTATTTTG AGCTTAGTGC TAGGACTGAG
AGGCTGCACC ATAGGGAATG TATGGGAGAT GGTGAGGGGT GCCAGTNAGG GGTGCGTGGA GGAGAGGCCT GGGCTCCTCT
ACTGGATCTA CACTCTGTCC CAGGTTTTTA GATCCCACTG AGCCCAGCTG ACTGAAAACA AGGACAGTCA GGGTGAAACT
TCTTTTGCCA GAAGTGTGGC CTGAGTTGAA TTTCTGGGAG GATGACGCAG ATGTCTGCTG CAGAGCTGGG CTGAGAGTTC
TNCAATCTAG CTCTGACTTA GGTCAAGGGG CCT

### SEO ID NO:1756: (Length of Sequence = 184 Nucleotides)

TGGCTCGGA GCATGGACT GGACATGCGC ACCATTGCCA CTGCACTGGA ATATGTCTAC AAAGGGCAGC TGCAGTCTGC CCCTTCCTAG CCCCTGTTCC CTCCCCCAAC CCTATCCCTC CTACCTCACC CGCAGGGGNA AGGAGGGAGG CTGACAAGCT TTGAATAAAA CACAAGCCTC CGTT

### SEO ID NO:1757: (Length of Sequence = 425 Nucleotides)

ATTACAGGCG TGANCACCAC ACCTGAGCTA ACTICCTGGC TTTTCAATCA AACCATCTT GTCACTTCCT GTCCCCACCT GAAGTCAGAA AGCCTGAAGA GAAGACGCT CTATTGCCNC AGCTGGAGTG TGGTGGCACA ATNTCAGCTC ACTGCAACCT CTGCCTCCTG GGTTCAGGCG ATTCTCCTGT CTCAGTCTCC TGAGTAGCTG GGATTACAGG TATGCACCAC CACGCCCTGC TACTTTTTCG TATTTTTAGT AGTAGAGATG GGGTTCACC ATGTTGGCCA CGCTGGTCTC TATCTCCTGA CCTCGTGATC CACCTGCCTC AGCCTCCCAA AGCGCTAGGA TTACAGGCGT GTAAGCCACC ATGCCCCGCC AATTTTGCCA GTTTTTATTG GGCTATTCCT TATTGAGATC TAGGG

#### SEO ID NO:1758: (Length of Sequence = 407 Nucleotides)

AGGAAGGCAT AAGCTAAGCA TCCTTCTAAC CAGITCCCAA AGTCCCATCT GCCTCCATGT ACCAGCTGAT CGCAGAGCTG
GACTGGGCA GGCTGGGCTT CCAGGAAATT CCTGAAGTTC TGAAACAGCT TCCCCTCTAG AGAAGCCCAC CCAATGTGTT
TTTTAGTGAC AGGAAGAAG GAGGGAAGAG CTGATGTGGT GTGGCCTGCC CATATCATAC AACCCCACCA GGAGCAGGGC
AGTTCCCAAG GTGGGTGCCC GTAGATCTGG GAGGCCAGGC TGGCATGATT CCTGTGAAGA ACTGTGCCTG TNTCGTCAGG
GAGAGGCCTG AGCCCTCTCA GAAGCAGGA CAGCCACAAC TGAAGAGCAC GCCAAGCTGA GGCAGCAGCA GCAGCTGGGG
GAGCAGT

SEQ ID NO:1759: (Length of Sequence = 386 Nucleotides)

ATATATTITI TITGITAAAT TICTITGIAT TITTITCCIG CAAGACTIGG TGITGGCGGC ACTGITGIAG TITAACTICA
ATCCCAAATT CCATGAAATA GAAATCAGAA GIAAAGGITG AGAGGGGAGG AAGGAGGGAG GCAAGCCAAG GAATAAACAA
GAGITTGACT AGAAAAAAAAG AAGAGGGIAT GIGIGGIGGG CATTCCTGGG CAAGGCCATT CCTTGAGGGA GGGGGTTGGC
AGGCAGCTTG CCTCTGCCTC ATGCAGGGGA GGGAGAAAG ATCCCCTGGG GACCCTGCAG TCCCCTCTTC CTAGGGCTTC
CTGCTCCCAG GGGAAAAACT AATACCAGAG AGGGATCAGC CACAACCTNA AACAGGGCTC TTCACC

SEQ ID NO:1760: (Length of Sequence = 395 Nucleotides)

CTTCATGCCT CTGGCCGGGT CCAAGCTGGC CAAGAAGAGG GAGGAGGCCA TTGAGAAGGC CAAGCGCGAG GCTGAGCAGA AAGCCCGAGA GGAGCGAGAG GNGAGAAGGA GAAGGAGAAG GAGCGGAGG AGAGCAAGAG CGAGAGCNTG AGGCAGAGCG GGCGCTAAG GCGTCCAGCT CAGCGCATGA AGGTCGCCTC ANTGACCCAC AGCTCAGTGG TCCTGGCCAC ATGCGGCCAT CCTTCGAGCC ACCACCAACC ACCATTGCTG CTGTGCCCCC CTACATCGGG CCCGACACAC CTGCCCTTCG GACTCTGAGC GAGTACGCCC GGCCCCACGT CATGTCGCCC ACCAACCGNA ACCAACCCTT CTACATGCCC TTAACCCCACG GACCC

SEO ID NO:1761: (Length of Sequence = 378 Nucleotides)

CCCACCAGAG CATITICAACA AGGCTIACCA CACAGGCCCC AGIACCTITC TACTCIACAA TGAGGCTCAG AAGCTCAGTG
TACCACCCCA TCCCCAGGAG GCCCACTIAG ACCAGAAATC CCAAGTCCAT TAGCTACAGG CTGATATTCA GGGACATCGG
TGTAAACAAA GAAGTGGGAT ATGAACIATA TCCCTGATTT TTTTTTCTTT TTTTTTTTTT TTTTTGAGAC TAAGTCTCAC
TCTTGTCCCC CAGGCTGGAG TGCAATGGCG CGATCTTGGC TCACTGCAAC CTCCGACTCT CAGGTTCAAG AGATTCTCTT
GCCTCAGCCT CCTAACTGGG GTAACAGACA CCTGCTACCA TGCCCGGCTC ATTTTTTT

SEQ ID NO:1762: (Length of Sequence = 351 Nucleotides)

TGATAAATAA AGAAGTTCAA AAAAATCTTT TAATAGAAGC TATAAAATAG CAGATAAGCT AAGTCATTCT CATAAAACAC
CATTTGTCAT TIGAATGCGT GCATIGIGGC CIGITACTTT TAACTAGICT CACTAATTTA TAGTTATATA TGATGTAGAT
CTAGAATTGIG ATGTACACTA AGTGGGTTGA TCCYGAGATC AAGCTATGAT TGCTGCTTGC GTAAAGTGTT CCYTTTGGGA
AATAAATAAT CITTCATATC TGTAAACTTT GGTATAATTG GTTATTTATG CAATGTATTG TTGTGGTTGT CAACTCAAGA
TTGTATTCTC ATCTGGGGAC ATTATGAATC T

SEO ID NO:1763: (Length of Sequence = 157 Nucleotides)

GIGIWIACIT AGIGIGIAAA GIGAACAAGA AAAGCAGCAT AAIAAAGGAG CIGIGITITI ATCAGAGGAG CCITCCITCI GAGITTTIAC ATAAGIIGAT GCCITCACIG CAACIITGAA TACAGIGCIT TGAATGIIGA AACACITGAA TAAAATG

SEO ID NO:1764: (Length of Sequence = 321 Nucleotides)

GCTCCTCTGC CITCAACTCC TCCAGCTTCT NACCACTTGG CAACGCACCA CTGCCAGTTC CTCTGGGGCT CTCAGAATCA
CTGGAGTACT TCTGCAGCTC TCTTGGATGA CCTAGGGGTG CAGCAACAGG CACAAAGCTC TCCTCCAGGT CCTGGATTTC
TTTATTTCTT CCCTTCCTTC TCCTTGGTGT ATTINICCTG TGAGNGTCTG ACTCTATCAC TTTCAAAGCT GTGCTGTGGA
TTTGGGTCTT TAGATGAGGC TTCATGCCCT GGNATAAGCA AAGGAGCCTG ATACAGAGTT GGCCTGCAGG GAGCAGCTTT
T

SEO ID NO:1765: (Length of Sequence = 420 Nucleotides)

TCACGCCTGT NATCCTAGCA CTTTGGGAGG CCGAGGTAGG CAGATCACCT GAGGTTGGGA GTTCGGGACC AGCCTGCCCA GCGCGGAGAA AACCCGTCTC TACAAAAAAT TTTAAAACTT AGCCAGGCGT GGTGGCGCAT GCTGCAGTTC CAGCTACTCG

# SEO ID NO:1766: (Length of Sequence = 373 Nucleotides)

GTAAAATACT AAGACACTAA ATGCGIATIT TAAATITGCC CATTAAGITT TGGGCTGCGT AAGAAATTAG TAAAAAATAT
TTCCAAAATAA CATGCAGAAG TTGTTTTTAA ACTTAAAATC TCATATTTTA GCTACACCCA CAGCGATGCT ATAGAGAGGA
GCTGGATTTC GTTGTATCTG AATGGCTCAG ATTATGTTCC TTCCAAAAAA GTTATTTTAT GTACGATCAT TTTTTATATG
ANGCATATGA AAAATCACCC AGAATCTACC ACGIATTTAC CACATAGACA AATGTCCATC TTTAGATCTG TCATTCAACA
CCATGTTATT CTTTTTATGC AACAGAATGC AGTGTTGTGA GAAGTACATC AAG

## SEO ID NO:1767: (Length of Sequence = 330 Nucleotides)

## SEO ID NO:1768: (Length of Sequence = 361 Nucleotides)

AACTOGAAAA CCAAGACTGG TAGACTCTCT TTTTCTTCAG ACAATAGGCA GGAGCCAGGC GGAGTCCAGG GATTCTTGGA
ACACCTATCT TTTCTTCGGA GGACACTAAG TTCTATTTGA AGACAAAGTT CAATATGGCA ACAGGACTGA TGGGACACGA
AGGAGTCGCT ACCGTGATTT GGTGACAGTT CTTCAAAACG ACAGTNTCTC AAGGAAAGGT GGACCTAGGA ACTCCTGAAC
TTTTGGGTTG CCTTAAGTGA GAAATCAGCA TGGCTCAGGC AAGTCTCCTG GCTTGTGAAG GCCTAGCAGG TGTGAGTTTG
GTTCCCACTG CAGCCAGCAA GAAGATGATG CTGAGCCAGA T

# SEO ID NO:1769: (Length of Sequence = 389 Nucleotides)

CAACTACCGC AGCGCCAACT TCAGAGAGCA CATCCAGCGC CGGCACCGGT TTTCTTATGA CACTTTTGTG GATTATGATG
TTGATGAAGA GGACATGATG AATCAGGTGT TGCAGCGCTC CATCATCGAC CAGTGAGCAG AGTCCGTGCT TGCTATCTGT
CTCATGTTAC AGAGCTTCCA TTACATATTA AACGTGAAAT CTATGACTCC TGTACCTTAC CTGTTCAACA GACCTGAAAA
TGAGCCATGG CATTGGGACA GGGTCACTTC TGACAGGGGA AGTGGGTCCC CAGGTCAGCC CTTCTCTTCC CTTTGGGCTC
TTGCCAAAGN TGTCTTCCCC TACTGTTAAN CTTGTTTGTC ACACGGTCGA GTTCGTATTG GGTTCTCGG

## SEO ID NO:1770: (Length of Sequence = 394 Nucleotides)

GCAGTITAGA GGAAGCTCCT TCTGGGCAAG GTCAGGCGGT CCTCCTTCCC TCTCTCCTTC CCCTTTGTCC CAGCCTCAAC
TGACTCTGGC TGTGGGAGGT GTGGAGGGTC CTTAGGCTTC CCTCCCCAAC CTGGCCTCCA CCAACACCCC TAACAGGAGG
CCCGTGGAAG GCTCAGGCTC TCCTCCGCAT CCCTCCTCCT TCCTGCCTAT CGGAGGGAGC CAGGGTCCCC TAGGCTGACC
CTGAATCCTC TTCCTCCCTT CATGGGAGGG GGGCAGGAAT CCAGAGGAGG ATGAAGCCAG CGGGACCACA TGGCTTNGTG
GCTTNGACAA ACAAGCTCAG GGAGGAAATG AGGAGGCGNC GGCTTCAGAG GATTGCAACC CTGTTGGGCA CAGA

SEO ID NO:1771: (Length of Sequence = 373 Nucleotides)

CAGAAAAGGC AAAGITTATT CCAGTGTTGA CAGAGAGAG GTGAGCCTTG CACAGCAATT CTAAAAACAT GTCATCTCCT
TCACCTAAGA GGTAAGANCC GGCTGTAAGT CATGGGGTCA CTAAACCGGC CGCAGTTACA GTAAGCAGAA GAGGTCACGG
CTCAGGCCTT CTCAGACTTT CCCTGGGACA CACGGCTCTC TGGGGGGGCC CGCCGAAACC ACTCGGACCA GGAGCCATCG
TACACGGCCA CATCAGGCTT NCCGCAGAGG TAGGCAGCCA AGGNCACGTG GCAGGCGGTG ACTCCCTTGC GGCACGTGGC
AATGAGAGGC TTCGAGAGAT CCACCTTCTT GGGCTTGAAC AGAGCACGGA GCT

SEQ ID NO:1772: (Length of Sequence = 281 Nucleotides)

AAAGTGCTGG GACTATAGGC GTGAGCACTT GCATCCGGCC TAGGTGGGGT TTTGTCCCCG TTCTGCAGGA GGGAGACTGA GGCTCGGAGG TTCAGGGCCT GCTTGGCCTGT ACCCAGCCCC AGTATGTGCC TTGGCCACAC TAGTCAGATC CTTCCCCTCC CACTCCTGCC ACCCTGCTCC TGCCCTGTCC CATAATCCAG GTTGAATGGG GGTGGGGATT TTMGGGAGCA AGGAGGGCTC AAAGAGATGG AGATAGGACT GTTGTCAGGC CAAAAGTGCA A

SEQ ID NO:1773: (Length of Sequence = 401 Nucleotides)

CTCTCTGCCA TGCTAACCAA CGTAGAAGAG AATAAGATAA AGCAATGAAA AGCAGAGTGG CACTCTGATA TATAAGATTC TCTAAGAAAT ATAGAATGAAA ATATAGAATCCAA AAGCATGAAA AAGAGTAATT CTTAATCCAA AACTTTACAG TATTAGACCT ACGAATCTG ATGATGCCTG ATCAGATGCT AGTTGTTCTC GACAATCCAT GCAGTTTTCC AAGATTACAA ATATACCATG GTTATTCTTA TTTCTTTCTG AAAAATATCT AGGATATTTT ATAGTGTCAT GTGGTAAAAAT ATTCATTGA CANTCACAAT GAAGTATAAAT CAGAAGTATT AGCAATTTTA CTTTGTTTAT CCTGTTAATC C

SEQ ID NO:1774: (Length of Sequence = 230 Nucleotides)

TCTGTTAAAA AAAAGTAAAA ATGTTACACA TAGGNAATAA ATGTAAAAAG CTATACTTTG CCAAAATAAA GTTTCAGCTG AAGGTAATGC TAGTTATAAA TTAAATACAA TTCTATTAAG NNCTTGCAAA AGTCAAAGGA AGACGGNAAA CTCCCTCTTT TGGCAATTCA AAGGCAAAGA CCTGTTCATT TATTCTTAAT TTTNCTTTAT ACAATCATTA TCCCCCACAG

SEO ID NO:1775: (Length of Sequence = 359 Nucleotides)

ATTCAGGACA TAGGCATGGG CAAGGACTTC ATGACTAAAA CACCAAAAGC AATGGCAACA AAAGCCGAAA TTGACAAATG GGATCTAATT CAACTAAAGA GCTTCTGCAC ATTAAAAGAA ATTACCATCA GAGTGAACAG GCAAACTACA GAAAATCTAC CCATCTGACA AAGGGCTAAT ATCCAGAATG CTACCTAATT TTTAAAGACT TTTTCCGGCA TCTTGAAAAA AACCACCATT ATTTGACATA GGTAAAACTG AAAAAACAAA CTATTCATAA TTACAATTTG TGACACATTA TGTAGTAGCT AGGTTCATCA CATAAATTAC ATGNTACCCC AGTTCAAGTT AAATTTCAG

SEQ ID NO:1776: (Length of Sequence = 375 Nucleotides)

GGCAGAGGCT GCAGTGAGTC CAGATGGTNC CACINCACTC CAGCCTGAGT GACAAAGTGA CACTCCATCT CAAAACCCCA
ACTCCCCCCA AAATTITIAA TITGGTTTGC ATTTCTTTGA TITATGTTTGN GGTCGATTGA GACTTGAGGC TGGCACTGGA
GCAGGCGTTC CCACCTGTCC CGTGAGGCAA AGGTCGTGGG GAGTGACCAA GTGCATCAGG GGGTGCAGAT GCCCTATTCT
GGCTCTTTCA CGCTCAGCCA TCTTAGCATA NGTGAATATA CCATGAGCTG TTTCTCAGCT TGTTTTATTT TCCTGGAGAG
ATAGATGTCA CTGGAATGGN CTTINTCCAA GTGAAAGGCC ATCTTGTGCT ATGAC

SEQ ID NO:1777: (Length of Sequence = 387 Nucleotides)

GATAAGGGAG GAAAGGCAGG AGGAGATGAG GCCAGCCCCA CTGATGACAC CTTGGGCCAG GCCTCACAGC TGCAGGCATC AGCCGGAAAC TCCAGGCTGC TCATGGTCAC TGGCGGTGCT GAACTGTCTC TCCACTTTNT TTTGGTCCTT GATCTTGAGT

CCAATGTCCA CTCTCTTCTC AAAGAAGTTC ACCAGCACGG ACTCCGTCAG GATGGAGGCC AGGTTCTGCT CAAAGGAGAT GCACCAGTCG GTGTCGACGG TGCCGCCGAT GCGCGCTGTG GGGCTGCAGG CCTNCCCGCC CACCAGCACC GTGTCGTCTG CAAGGTCTTC ACATTGCAGG GAGCCCGTNC TGACCACCGA GTAGGAGGAC ATGGACATGT CGTCTTT

## SEO ID NO:1778: (Length of Sequence = 297 Nucleotides)

CCCCCCAACT AGAAGAATAC AATTAAAAAA AGAGGCAGTA CACATGGTTA ATAAACAGAT GAAAAAATTA AAATTCACTT
GTACTATAAG ACAGGCAGAT TAAATTATTT TTACCTATCA AATTAACCAG AACAAAGGCA TGCACTTTAG TGAGGATGAG
GAACATACAG ATTCACTGGT GAAAGTAAAT GTACACCAA CCTTTCAAGT TGATAGTTTG GCAGAAGTTG CTAAAAACAT
TTAAAGCTTT CATACTTTTG ATAAGGCTTT TTATTTTAGA AAACATATAA ATAAAAA

### SEO ID NO:1779: (Length of Sequence = 353 Nucleotides)

CAGAAGTAAA AGATTTWAT TGTYCTATAG ACACTTCTGA AAAGAGATCT AATTGAGAAA ATATACAAAG CATTTAAGAG
TTTCATCCCC AGAGACTGAC TGAAGGCGTT ACAGCCCTCC TCTCCAAGGC TCAGGGCTGA GAACGGTTAG CATATCGAWT
GATCAGTAAA AACATGCAAA AGTGAGAAGG AAAGGGAAAA AGGTGCATTC CCCTAAGCTG AGGGGGATGG AATTTCAGAA
CAGAGGAGGC AGGGTGGACA AGTACCAGGT GGCTCTCCCT TTCCCTCTGT GTTATCTTTC AAAACAGTTC CCAAGCTTNG
NGGAAAGCAA TGAGCTCCAC CCTAYTCAGC AGA

### SEQ ID NO:1780: (Length of Sequence = 428 Nucleotides)

CGGCTTCCCC GGAGCAGCCG ACAGGCCAC AGGAGAATGG TATGCTGCTC GGCATGGAGT GAAGACCACC CCGTGTGCAA
TCTGTTCACC TGTGGGTTTG ACCGCAAGC CATTGGTTGG AACATCAACA TCCCTGCATT GCTACAAGAA AAATAAGGAC
ACCGCAGCC CTTAGTTTCA CTGTTTGCCA GCACAGACCT TTGATGGGTG CAGGCTTTTC TGCGTATTAA TCAGCCATTT
TTGTGAGAGT TTGACCCTGG AAAGGGTGCT TTGTATATGT TCTTTTCACA TAGTGCCCAG CTTGCATGAA ATGTACAGAG
AAATGTGTGG TCGTATTTTT TACTTTTGTC TTGTATATGT ATGGATAATT NGGGTCCCTT GGGCAGTAGA GGCAAAGCTC
ACCTCCCATG TAGCACATGA AAATGCTT

## SEO ID NO:1781: (Length of Sequence = 459 Nucleotides)

ACCICAGATT GIGAAGGCCI CIGTAGGCTA TGITAAGGAC ACTAGAAATC TATIGAAAGG TITTAAGCAG AGAATIGACT
TGCTCATATT TTINCTICAA AAAGCICAAT AGCTACAAAA CGGTCAATAG ATGGTAGCTI TGIGGGCCIG GGGTGAATGC
AATGATATIG CAAAACAAGA TATAGGGAGA CAAGAACTIT TAATAACCTA AACCAGTGGT TCTCAAACTI TCCATGCATC
AGAATCACCI GGATGACTIG CGAAAACACA AATAATCAGA CTTAATCCCT ACATTITCTG ATTTAGCAGG TATAGAATGA
GGITTAAGAA TTICTAACAA GITCCCAGAT GGCGTAAGGT GICTCTCAGG GITTITACTIT GAGCAACTGG GTGGATCCNG
TGGATCTTAT GICCCINCGA GTAAGGGGTC AGGTACAGCA TTCTCCCGGTC AGATTGTTT

## SEQ ID NO:1781: (Length of Sequence = 420 Nucleotides)

GAAAGCACAG GAGCCTGCTT CCAAAGAGGG ACTGTCCCGT AATTNAGAGA TGCTCCAAGG CTGACCATCC TCCTTCTCCT
GCTGCACACC CAGCAGCCAT CTATGGCTGG ATTTGGAGAA TTTCTGGTCA AACCGGTGAG TATGAGGAGA GCAGGCCAGT
TGGGGAGAGA GGTCCCAGCC CAATTCTGCC CAGAGAAGCT CCCAAAAGAG AGGGAAGTGT CCTGATGAAG AGCCCATGAA
AGGGGTGAGA CCCAGGAGGC TGTGGAGATT GCTGCGGGCT CCTCTGGTCA GTAAGGAACC CTGACAAGAT CCCTAGGATG
GGGGTCCCTT AGTCTCACTG AAGTTCTTGT AACTTNGGAT TGGGGCCAGG TCANCCTCCT CTGATACCCG AGCTACAMAT
CTGGCTTCCC AMTTCTAGAG

SEQ ID NO:1783: (Length of Sequence = 427 Nucleotides)

11/2

11

1

AGASCTTAGC ATGCTGTTGG TTCATGTTTT TATGTGTTTA TTTCACATTG ACTITTGCCG TGAGCTTTGA GGGAGACAAC
ACCATCACAT ATGTGTAAAT TGTAAAAGAA TTGGGAGAGA ATAGCTTTGG GAGATCATTT TCTTACTGGC CATGATGAAG
AAAGCTGTAT CGTAGGAAAA TTACTAGGTA ATTTTACTCA CTTGATAAAG TTAATTTGCA AGGTATCATT CGATTGGTAG
AGTTACCAAA ATGAGAGTTA AAGAAACAGA AATATGGTTT CAGTTTATGG TGCATTCTTA TCTTTTTCAC TGAGTCTATT
TCTGTCTGGT TGCTTCACTT AGTACTCCAA CCAGACAAGA GGAAGACAAC TATGCTAGTG TTTTAGGAAA TGGGACAGAA
TGGGGTGATT TAAGTAGGAG CCNGGGT

## SEO ID NO:1784: (Length of Sequence = 428 Nucleotides)

ATGGGATACT AATGCAAGCA TTCAGTGAAA AAAGTAGATT ACCAAACTAT ACGATCCTCA TTTATTTTAA AAAGTGATAT CACCCAGAAA AAAATAAGAA AGATAAAAGA TGTTGGTAAA ATAACTAAAG AATAAAAATA TAGGGGAAAA GGTAGCCAAG GGATAGATAT TGATATTCAT TTTCTTTTTA CAACTTTATT AAGTTGTAAT TTGTGTGCAA CAGATTGCAT ATATTTGANG TATATAACTT GACAAATATA TACACCCATG AAACTACCAG TTATAATTTT AAACATTTTC ATGGCCCTCC AAAGTTTCCT TGTGTCCTT TGCAATACAC GCAAACACAC ACACCCCACA CACAGTATGT AGGGCCAACCA TTGATCTGCC TTCTGTTACA ATAGGGTAGG TTTGCATC

## SEO ID NO:1785: (Length of Sequence = 414 Nucleotides)

GIAAACAGAT TACATTIGAA CACCIAAATA AGTATTIGIT TCATAATCAT TACATGCTIG TITATGATIT ACAAAGATIT.
GGIAGAGAAA AGTACAGICC TIAAGGCATA TATATGCCAA TGCATTAAAC TACTCAGCTI TIGIGCCAGC TCAGGIGTIC
ATAGGAACAG GAATGIGGAA TACCAGCTIT TIACTITAAT TATACTITTA TGCTGAATIT TICTTCCAGT TAAACCTITA
ATTACACTAG TATGIAAAGT AGTIACTGAG AAAAATAAGT TITTGATTIC CCTTCTGTTG GATCTGTAAC ATTTTTAAAT
GGAGCTATIT AACACATGAC ATGCTAATGT TACTTAATGG GTCTCTGCAT TITTAATTTTA NGAAACACAA ACCTGGGTCA
CAAAACATCT TCAG

#### SEQ ID NO:1786: (Length of Sequence = 397 Nucleotides)

GITATTCCAA CCAAAATTC CTAAGATTGA AATGCAGAAA CTTACAGAAT TGAGTAAAAA GACAAAAACG TAAATACTAA
ATATTGAAAA GATGCAAGIN CTCCCCAAAT ACACTCATAG ATTTAATAAA ATTCAAATTT AAAGGCAATT AATTAGGATA
GAGGCAAGAA TCTGGGAAGA AAATTAATCT GAAGTTTGTC TGGAAAAATC AATGGGTGAA ACGAAAATAT TTTAGGATAA
GATTAATGAG AAGTAAAATT ATTTCAATTA TAAANGTAAA ATGATAAAAT AGTTAGACCT ATATGGTACT GATGCCAGGN
ATGTTATACA AAGCTACGTC AAGGCTTGAG GATAATTTTN TTGAAGATAT TCGTGGGTAT CTCATTGGCT ATAAAAG

## SEO ID NO:1787: (Length of Sequence = 408 Nucleotides)

TCCCACAATT GACAATATAT ATGCATGIGT TTAAACCAAA TCCAGAAAGC TTAAACAATA GAGCTGCATA ATAGTATITA
TTAAAGAATC ACAACTGIAA ACATGAGAAT AACTTAAGCA TTCTAGTTTA GITTITTGIA ATTGCAAATT ATATTTTTINC
TGCTGATATA TTAGAATAAT TTTTAAATGT CATCTTGAAA TAGAAATATG TATTTTAAGC ACTCACGCAA AGGTAAATGC
ACACGTTTTA AATGIGIGIG TTGCTAATTT TTTCCATAAG ANTTGTAAAC ATTGAACTGA ACAAATTACC TATAATGGAT
TTGGGTTAAT GACTTATGAG CAAAGCTGGT TTGGCCAGAC AGTATACCCA ANCTITTATA TAATATCCAG ANGGCTATCA
CACTTGTG

# SEO ID NO:1788: (Length of Sequence = 391 Nucleotides)

 TTCAGTGCAG AAGTCAGTCC AGGTGGGTTC AGGCCCATGC CACCTTCTCT GGCCTGCACA GTCCCACCCC AGGCAAGGGG TTCTTTCCAG AAAGGCTAAA TGCTCTGTCC TAANCCINGG AAGTGTCCCT TTCAACTAAA CCCCTGGCCT T

#### SEO ID NO:1789: (Length of Sequence = 312 Nucleotides)

CAGGGTGAAG TGAGCCTGTG TGGGAAATGA GTCTAGTGTC AGGAGGCCTG GCTGCTATAA TGATATTTAT CTCACAGTTT
ATATTTCATT CATTTATATT ATTTTTTTAA AAGGTTTCTT TATCAGCTAC TAAACATCTC AGCAATTTGG TGTGCATAGC
TCTAGATTAA GCAACAAAGA ATTGTACTGA TAACAAACCA CAGGGGAAAT GGTGGTTAGT AAGAGTCAGC CTTATAAAAT
TTACATCCAC ACTGTTTCAC AGCAAGATTG CTCTCTCCAA AACGTAGCCA TCAAAAGCAG CAAACAAACC CT

## SEO ID NO:1790: (Length of Sequence = 281 Nucleotides)

TGITTCCYTC ATTACCTGIA GACTATCCCC TCTCCTCCCA CCACAWIGIT TCTWIGATGA KITACAAACA GAAAGGAAAT CACATITTCA TACTAAAAAC AAAATGWICA GAGCCTIGAT TTYTCCACTA GAWACTACAC GTACAGITAA GAGTCCACAT GCAACACCIT AAWICACAGA CTGAGACCIC ACATTYTGAC CTGGAGNITC CTCCCCTTCC CCAGCCTTGG GCTAGCTTTG GCCTAGGCTC AKGTAATACT GACACCCACA GGCGCTGCTC T

#### SEO ID NO:1791: (Length of Sequence = 261 Nucleotides)

AGGCAAAGCA GAAAGGTGTG TTTGCCAGAC CAGCATGGGC AGCTCAGAGG GAGCAAAGCA TCCACCAGAA GAGGCTCTCC
ATTTTTTTGT AGGGCCTGAC AGTTGAGATT TGAGGCTGAG TTAACAWTGG GACCACTGAA CTTTTTTCCA ATGGAAAAYT
CACGGCCCAG TCCCACAGGA ACTTTGCGGC ATACCAAACA ACAWTGAGGA AGGAAGGGCC GGGTGGCTCT ACCAAACAKT
TCAGGTCCAC TGCGTGAWTG A

#### SEQ ID NO:1792: (Length of Sequence = 324 Nucleotides)

CTCCATCTT ATCGCCTGIA TAAACATCTC TGGTCTGIAC ATACATTTCA TACATCGTAG GGTGGGAAGC GAGGCCCAAA GGGGGCCCAA GGGGCCCAA GCAGCACAAC AGCTCACCG CTTTCCCTAC AGCCCTACCC GCTCTGTGCA AAACAAGGCC AACAGCTCCT GGTGGGGAGG CCACATNTAA GTCCTAGATT CAAACACTGA AGCGAAACAG GCAACTGGCA CAAGCAGCAA GCTTAGGCAT GGGC

## SEQ ID NO:1793: (Length of Sequence = 386 Nucleotides)

ACTOTTGGGG ACCCAAAGAT GTCAGGTCCC CATACTCTGA GGAATCAGGA CACAGCCCAG TGCCTGACAC CACAGAGTGA
GGCAGCCCTT CGGGTGAGGG CCTGGGCCTC GAGGGATGGC AGCCACCACT GCCTAGGCAA ACGCACCTGG GGCTGAACTT
GGCGCCCCGC ACTTTNAGGA CGCCAGCACC AGTGGGCACT CGGAAGTGCC AGTTCTGGCC CAAATTTGGT GACCTGGGTC
AGAAGGACCT TTCAGAATGA NTTGTTCCCG TCAGCAGATA CCGTCAAGAC ACGCCTGGCT CTGAGAGGGG CTGGGTGCCC
GTTTTGCCTG TATTCTCCTG GGGGCCAGCA CGTCTCAGAG GGTGTCCCTG TGGGTCCCCG GGGTCA

## SEO ID NO:1794: (Length of Sequence = 308 Nucleotides)

GGATGCTCTT TAAAACATGC AAATTGGGCC GGGCACAGTG GCTCATGCCT GTAATCCCAG CACTITGGGA GGCCGAAGTG
GGTGGGTCAC CTGAGGTCAG GAGTTCAAGA CCAGCCTGGC CAGCATGGTG AAACCTCATC TCTGCTGAAA ATACAAAAAT
TGGCCAGGCG TGGTGGCATG TGCCTGTAAT TCCAGCTACT CGGGAGGTTG AGGCGGAGA GTTGTTTGAA CCCGGGAGGT
GGAGGTTGCA GTGAGCCGAG ATTGCACCAT TGCACTCCAG CCTGGGGTGA CAGAGCGAGA CTCTGTCT

# SEQ ID NO:1795: (Length of Sequence = 418 Nucleotides)

GAAACGCTAA GGTTTGACA GCGTTACAGT GAATTCTCCG GCTGTAGAGA TTGGAGGAAG TCGGGAGAAA TTCGTCTCTA
AGTTGTAAGG TGGAACAGCA TTCATTTTCT TACTGCCAAT GGAGGTTTTT CATGAATTTA CTAACTCAGT AAAAAGATTC
GGCTTTTTTT TTTTAATCTT AAAGGATCAC GCTTTAAACC TCTGTAACAA AGTAATTATT TGTACCACTC TCTACCCCAC
CCTCCAACAA AATAACCTAT CGGYTCTCAG AAAATAATAA CCCTTTGCCT GCCTTTGAAA TAGTTATCCT TTTTAGTATG
ACAGTGTTCA AAAATTCTTT TCTTAGACTT GTAGCAGAAC ATAGCTATGA TGATCTGAAT TTTTCTCTTT CAGCTTGTTC
TAAGACGAGG GGGACTCC

### SEO ID NO:1796: (Length of Sequence = 416 Nucleotides)

CTITATIACA TATECAACCI TECCATECCI GCCAFTIAC TCCCCICCCG CCAATGITAT CCTCATGATA TCAGCICCCT CTTGGGCCA CTGAGCTGCC CCCCTTTCCT TCTGGGCTGG AGTAGTGGTG CCCCTCAAGC AGGCAATGGG CAGGGGGAGA TCCACAATTA ATCGTCGCAG TTCTCTTAAA AGTATTAACA CTTAAATAAG CACTCTTGGG GAGTTGCAAA GGATATTCAG GATGGGATGC AGTGGGAGGC TACCCCTCAT CCCAAGGTACA GGCTGGAATG AGCTACAGCT GGGTCTATCG TGGGCCTCAG AAGGTGAAGA GGGACCCTAT TCTGGGGCTT AGTGTGGGTG GGGCATATCC TCCCCAAACT TGTTCTGTGG GCGATGTTCT TCACATCTAG GAGAGC

#### SEO ID NO:1797: (Length of Sequence = 298 Nucleotides)

AGGAGGGAAA CCAGAATCAA ACTACTACTT CTAGATGAAC ACAGGCTCTT GAGAGTCCCC AAGAGAGGAG GCTGTTGATC CAATCCTGAC TCAGACTACC TACCTGGCTT CCTGGCCCTA GGAGGTAATA ATGATAGTNT CAGGGGGTCC ATGTAGCAAT CCTGAGGTGA GAGCAAGCAA AGAGGATAGG ATGAAGGGAA GGCAGGCAAA GAATGTGCTC CTAGTAAGAA GCAACTCTNT TCCACTCACT TCCTTTTGCT CTNTGGCAGG CAAGTCAACT GGGTTCTC

#### SEQ ID NO:1798: (Length of Sequence = 245 Nucleotides)

CIGGICCATT TITACAACAN ATACATCCAA AACACTATAT AATANNITIT TITACAACAT TICCAAATGA GAAGATIGCI TITINCCCCCA CIACIGCIAT TCACACACAG TACITCCACG GCACAATACA TIAGGAGATC TAAAANIGCI CACCCIGTAC TCTAGGCIGC TIAGGAAATG TGAAAACIAG NAACATITAT AATGGCATTA GCTCCTTTCA ATACAAGGCA ACATITTAGN AACCT

## SEQ ID NO:1799: (Length of Sequence = 312 Nucleotides)

GAAATGITAG GCTAGITAGA AGGACACGGC AATAGCCITG AGATTYTCAA CCAGGGIAGI GIATTAGAWG TAAAAAGGAG AGGAAAGATI TGAGAGITAT CTCAGAAACA GAACCATCIA ATTITITITGG ACTGATTIGA CTGCTCTTTC ACTCATTITIT TTATICACTC AACAACTATI TITGAKTGNI TIGGATGGGI CAGACATTGC GCTAAGIGAA AAATAGGAAG GTAAGAAAAA GAACACTCIG AAGATGAATI CCCTCCCCAA AACTGAGCTA CTAGCTATTA CTCAGTGGGG CTGAAGTGAC AC

## SEO ID NO:1800: (Length of Sequence = 309 Nucleotides)

GECATGREC ACTAGECCAC AAGCGATAAG CACAGGCACC TGACTTTIAA GTTTTIGTTT GTTTGTTGTT TCCCAAAGTG
CTGATAACAA TAACAACAAC AATAGGATTC CAACCAGGNG CCTCAAGTGA CAGCCAGGNA GAGACCTGAA GGTTGGGGCC
ACCACAATGC CAAATCGTTT CTAAAGGAAG CTGAAAAATG GGACTGTCTT TTGCCCACTT CGTTGTGTTA AAAGGGGACA
TTTGTNCAAA CTNCCCAACC GAGTTCTAGA ACNTCCTGAC AAGGAGGCAG CATCCAGCCT TGACCAGGC

SEO ID NO:1801: (Length of Sequence = 166 Nucleotides)

CAAAANITAC TCTGCAAAAT TAATATATGA TTTACCTGCT GTTNTCATAA GATTTCCAAA TAGACAAACT CGGTATGCTT
NGGATTTGCT TTACATTCTA AGTGGATTTG GAGGTTCAGG CAGGCGCCAA GGAGTNAGCC GAAGTTTCAT CANGCGGAGA
TGTTGG

SEO ID NO:1802: (Length of Sequence = 281 Nucleotides)

GETGEATETC TITTGGGCGCA GEATGEAGCC CAGACCCAGT GETTACAGTG TGGAGCTCTC TCCCTGTCCC CTGACTCTGG CCAAGGAAGT GAATGCAAAG CAGCAGGGAG GAGGCAGGGT GGGGACGGCC CTCTGAGCTC TCCGCGATGG CTGGGGTGAG GTGCCTCTAA GACTTCTMGG CAGCCCTGCC TTCCCTACTC AGTCTTCCCG ATCTTNTTGC CACCTTTCTG TGTGGGCCAG NCTCCCGCCA GGTACTCAGA GGCCGCTCAG AGGGCAGGGT T

SEO ID NO:1803: (Length of Sequence = 429 Nucleotides)

TTCACAGITA TAGITGGGGA CATTAACAAC CCTTTCTCAA TAATTGATAG ACTACTAAAT AAAAAACCAT GAAGGATATA
CAAGAACTGT ACAACACTGG CCGGTGTGG TENCTCATGC CTGTAATCCC AGCACTTTGG GAGGCTGAGG CGGTGGNTC
ACTTGAGGTC AGGAGTTCGA GACCAGCCTA GCCAACATGG CGAAACCACA TCTCTACTAA AAATACAAAA AAATTAGGCT
GGCTGTGGTT GGCTTAATGC CTGTAATCCC AGCACTTTGG GAGGCCCAAGG TGGGCATATC ACCTGAGGTC AGGAGTTTGA
GACCAGCCTG AAAAACATGG TGGAAACCCA TCTCTACTAA AAATACAAAA ATTAGCTGGG TGTNGTGCGT CTGAAAAAAAT
TAGGTAAACT CCGTCTCAAA AAATAATAA

SEQ ID NO:1804: (Length of Sequence = 278 Nucleotides)

GACCIGAAGC TCAAAGTCIC TCTCCTTACA CAACCAGCGI CAACAGGGCC AAGCTACIGG CTAAGAACAG ACAAACTITC
CTGCTTCAGA CCACAAAGCI GACCCGINIT GCCAGACGCA TGTGCAGGGI CCINITACAG CCAAGGAGGG CCGCCCGACG
GNCTTATGCI CCTATCAATG CCAATGNCAT CAAAGCAGGG TGCTCCATTC GNCTTCCTAA GGNCGNCAAG ACTCCATTNA
AGATTCACCC TCCTGGTGCG GCTGNCCCTG GGAACTAT

SEO ID NO:1805: (Length of Sequence = 349 Nucleotides)

CCATCCATGG CGGAGGGCGG CAGCACGACG GGCGGGCAGG GCCGGGCTCC GCAGGTCGTA ATCTGAAGGA GTGGCTGAGG
GAGCAATTTT NTGATCATCC GCTGGAGCAC TGTGAGGACA CGAGGCTCCA TGATGCAGCT TACGTCGGGG ACCTCCAGAC
CCTCAGGAGC
CTATTGCAAG AGGAGAGCTA CCGGAGCCGC ATCAACGAGA AGTCTGTCTG GTGCTGTGGC TGGCTCCCCT
GCACACCGTT NCGAATCGCG GCCACTGCAG GCCATGGGAG CTGTNTGGAC TTCCTCATCC GGAAGGGGGC CGAGGTGGAT
CTNGTGGACG TAAAAGGACA GACGGCCCT

SEO ID NO:1806: (Length of Sequence = 403 Nucleotides)

GIGCAGIGIG GCCAGATCIT TICIAGIAAA AIGIGIGITA CIGAIGGGCA GACAGCICIC AITCAAGCAG IGACAGATGI AAGCNCITCC CATTITIGIG GCCCCATIGI AITCAGCGIG TGGCTICCAA GIIGCCIGGG ATCAICICCA CCCAGACTAA GGAAGAGGAA AGACCITGGA CAACIGCACI IGGCIGGITI INAIGGATCA GGCAAGGAAI IGGCICCAAC ACAITAGCIC ACAITCCAIT GGIIAGAACI GGGIITCICA ACIATIAGIA CAGGGIGAGI GIAGGGIITI GGCACCAIGG GCAITIGAGC IGGCCAAAGG CIAATCAGAG ITAGAACAAA GCCACAAAGC CIGIGAATGG IGIITATIGI IGIGAGGAGC IGICITGIGC AIT

SEQ ID NO:1807: (Length of Sequence = 426 Nucleotides)

GICCICAGCI TCACICIGGC ACCACTGIGA GCACCGGGAA ACCTACCAGA AGITGCIGGA GGACATCGCI GICCIGCACC
GCCIGGCIGC COGCCICTCC AGCCGAGCIG AGGIGGTAGG CGCCGTCCGC CAGGAAAAGC GCATGTCGAA AGCAACGGAA
GTGATGATGC AGIATGIGGA GAATCTAAAG AGGACGIATG AGAAGGACCA TGCGGAGTCA TGGAGTTTAA AAAGCTITGCA
AATCAGAATT CAAGCCGCAG CIGIGGCCCC TCTGATGGGG TCCCTCGCAC GGCACGGTCC ATGTCCCTCA CGCTGGGAAA
GAATATGCCI CGCCGGAGGG TCAGCGTTGC TGTGGTTCCT AAGTTTAATG CCCTGAATCT GCCTGGGCAA ACTNCCAGCT
CATCATCCAT TCCTCCTTAC CAGCTT

## SEQ ID NO:1808: (Length of Sequence = 431 Nucleotides)

GGIACTITIC CATTIAGATI CAAATGGAGC TAAAATTAAG AGITTTATGA GCTGITAAGA ATGAGGIAGT TICTCCTAGG
ACCCCCAAA GACAGTGCAA GTAATGACCG TITGGATCTC ATTCGTCGAT CTTTGATAGT ATGINCTGA GTCTACTCCC
CAGGAGCCAG GACAGGCGT AAGATGGAGT CCTTGTCGCA GCTGGAGCCT TGCCTAGCTG GTGATCACAC AGCCTGGNCT
GIACCTGCAC CCCACTGGAT GGTGGTACAT GGTGGCAGGG ACAGGACCAC ACCCAGTTAA GGCCAGACCA GGCTGAGTGT
GACCCCTGAG GTAAACACTT CACTAAGCTG TGTCTTGTTC ATGCCCCCTG CTCAGTGAAA GGTGAGTCCC GAGACCAGTT
GGGTACCTCT CTTATGCGAA CCAGAGACAT T

# SEO ID NO:1809: (Length of Sequence = 401 Nucleotides)

CGTGAGGCCT TGAGCACAGG TGCAAGCGGG ACATCCTGCT CGGCCGGCTC CGGAGCTCGG AGGACCAGAC CTGGAAGCGG
ATCCGGCCCC GGCCCACTAA GACCAGCTTC GTGGGCTCCT ACTACCTGTG CAAAGGAGGA GATCGACGTG TGGACCGAGG
AGCGGAAGGG CACCCTCAAC CGCGACCTGC TCTTCGACCC GCTGGGGGGT GTTAAGCGCG GCAGCTCACC ATCGCCAAGC
TCCTGAAGGA GCACCAGGGC ATCTTCACCT TCCTCTGCGA GATCTGCTTT GACAGTAAAC CCCGGATCAT CAGCAAAGGC
ACCAAGGACT CTCCGTCTGT MTGCTTCAAC CTGGGCTGCC AAGAACAGCT TMTTACAACA ACAAGTGCCT GGTGCACATC
G

## SEQ ID NO:1810: (Length of Sequence = 233 Nucleotides)

AAGTGCTATA TTCATTGTAT TATAGAGAAG GTTGGGGAGC ACAGAAGAGG ATCAACCCAG CTTTAGAAGG ATTAGAGAAA GCTTCCAGAG GGGTGGACAT TTGAGCTAGC AAGAAAGCAC AAGGGAAAAG GCATTTAGAC AGAGGAGACA ATTTGTCCTG ACCCAGAAGC ATTGGGGTAT GCTATGCATG GATAGACAAA GAATTTTTGC AAAAAGGGGG CCAGCAAGGC ATT

## SEO ID NO:1811: (Length of Sequence = 423 Nucleotides)

CAAAGAAGA GIIGAACIAT GIACATIGAA AAAAGGAAAG ACATTITITC ATACCAACCT TICCCIAGIT CGCAGITICT GAATAGIAGA AACAAAACAC ATTITIAAAT CITICIATCA ATTITAATTTA GGACGAAGIA ACAAACIIT TATAATTAAC CACTGAAGIT GICTITAAGG ACAAAACITA AATTITAAAA TGGGIGTTAC CATATTINAT GAGIGGACIG ACTCCAAGGI TGCCTIGCTC CAAGNNIGGG CATCGIGACA TIGCCGIGAT GCCCAGAAGA AAGITAATGG CAATGATGIC CAGICAGAGG GCAGACATGC TACACATCAC AATGATGAAG GCTGCGGGAT TCTGCCCTCT TCAACTTCCA AGTAGNAAAT TATTATTITC CATTCAAACT AACTGGGAGT GAG

## SEO ID NO:1812: (Length of Sequence = 394 Nucleotides)

GACCAGCCTG GCAACTTAGT GAGACTCTGT TTCAGGAAAA AAAAAAAAA GTGTATTTGG CTGTTCTGAA GCAGGCCATC
ATCACCCTTC ACCTCACCCA CAGGTGGCTC TCGGGGGCTG GTCCATGGGC GGCTGTGGGC TNAGGATGGA GTCCTAGCTG
TGACCTGTGC CCAGGAGGGC GTGATCCGAG TGAAGCCCCA GGTCTCAGAG AGCAAGCTGT AGCCAGAGGT ACCAGCTTCG
CCTGGGGCTT CAAGAACCTC CCATCTATCC CCATTCCTGA GACAGGAGTT ACAGTCCCTT TTGGNCCTNA CATCCAATAA

# AGAGACTGAT ACCACTGGAG TGGCTGGCTT TTAATTCCCC TGGGCCAGAC CTGCAGCCTT GCCTTAATCC TTAA

SEQ ID NO:1813: (Length of Sequence = 344 Nucleotides)

SEO ID NO:1814: (Length of Sequence = 442 Nucleotides)

GACACAGCAG GCCCCTGCCC CTGAAGGAGA CTGCATTGGA ATTTTTGCCA GGTGGCCCTG ACACATAGGA ATGCCCAACT
ACTGTGACTA CCCTCTGAGA TAAAAAGCTG TCCTACTGAT TTTAGAAGGC CAAAATTAGA GGTCATTTTG GAGGTCATGC
CAGTGGACAT ATAACAGTTT GAAATGCTTG TTCCCCGGTG CCGTAAAGAA ATAGTACTTG AACTTAAATT TATTCAGCAA
GGCCATTTTT ATTTTCTGCA GAAAGGGTAC ACTTGGCAGC AGTTTTNCCA CGAGAGTACC CCGAACAAAG GAGACAGGGT
CATTTATAAC CTGACGCGTC CACCCTTCTG CTGTGTCCGG TTTCCATTGG CTGGAACAGG ACCTCACATT CTGTATTTGT
CCCGATTGGC TAGCAACTTA GGACTTATTA AAAGAGGCAA AG

SEO ID NO:1815: (Length of Sequence = 299 Nucleotides)

GCAGAGAATC CCITGAACCT GENAGGCGGA GGTINCAGTG AGCCGAGATC ACGCCACTGG ACTCCAGCCT GGACAACAAG
AAGGAAACTC CATCTCAAAA AAAATTGAAA AAAAATTCAN GANATACAGA ATGCAAAANG GGACCAAAAA AGTACCAAAA
ATTTCAAAAAT TITGITAAAC TGTACCAAAT CTGCNTACGA AGCGTTATTT TTGCCCACAG GGCACTTCCC TGGAAAGNCG
TTACAATAGC TNAGGCTTCC TCTTCAGATA GANTTAGAGT GGCAGTAGGA TAGGCTCTT

SEO ID NO:1816: (Length of Sequence = 286 Nucleotides)

ACCCCGGGTC CCAGGTATGC TCCCACCTCC ACCTGCCCCA CTCACCACCT CTGCTAGTTC CAGACACCTC CACGCCCACC
TGGTCCTCTC CCATCGCCCA CAAAAGGGGG GGCACGAGGG ACGAGCTTAG CTGAGCTGGG AGGAGCAGGG TGAGGGTGGG
CGACCCAGGA TTCCCCCTCC CCTTCCCAAA TAAAGATGAG GGTACTAAAG TTGTCTTGGT TTTTATTTTT TTTTCTTTTTC CAGTATACTA GCTTGTCTTT TAAGAAAGGG GATATT

SEQ ID NO:1817: (Length of Sequence = 320 Nucleotides)

GAAAGGAAGG CCAGGGTOOG AGGAAGGATC AGCTAAATCT GAGGGAAGAA GAAGGAAAGG AGAGGACTA TTGCATAGCA
GATGCAAATG AAGGGACTGT CITATTATAC AGTITTATCA TCTGTTAATA CTCATAATCT TGTTTCTTTT TCAACTTTTA
TATAATTTTA TCTTTACATT AGTTAAATCA AAAATCTTAA AACACATTTT AAACGTGGTC ATAGGTTACT TTTATATATT
ATTGAATTTA TAATAAACAT GTTTCTTTNC TGGAAACTGG GATGGNACCN CGATGGTGTT TCTTGAATAT AAGAGTGTCC

SEO ID NO:1818: (Length of Sequence = 356 Nucleotides)

CCCAGGAGGC TGAGGCAGGA GAATCGCCTG AACCCGGGAG GCAGAGGTTG CAGTGAGCCG GGATTGTGCC ACTGCACTCC AGCCTGGTGA CAGAGCGAGA GTTCATCCAG ACACACACAT ATATATATAA TINCCAAACA GGCTTTACTA AACCCCCTGA GGCTCCATGA CACAGTAGAA AATCATGATT TAGTAGAAAG AGCATGGTCG TAGGAATCCA GTAGATCAGT AGACCTGAGT TAGAGTCCCCA AATCTGCCAC TTTCAATCTG TATGGCCTCA GGCAAGTTAC TTAANCTTTC TGTCTCTCTG TTTTCTTTAT AAAATGGGGG ATAATAATAG TAACTTCTTC ATAGGG

SEQ ID NO:1819: (Length of Sequence = 328 Nucleotides)

CCACTCCTGT AACCTGCTGG ATGACTCTGC ACTGCCCTTC TTCATCCTCA CCAGTGTCCT GGGTATCCTA GCTAGCAGCA CTGTCCTCTT CATGCTTTIN AGACCTCTCT TCCGCTGGCA GCTCGCCCT GGCTGGCCTG TCCTGGCACA GCTGGCTGTG GGCAGTGCCC TCTTCAGCAT TGTGGTGCCC GTTTTGGCCC CAGGGCTAGG TAGCACTCGC AGCTCTGCCC TGTGTAGCCT GGGCTACTGT GTCTGGTATG GCTCAGCCTT TGNCCAGGCT TTGCTGCTAA GGGTGCCATG CCTCCCTGGG NCACAGACTG GGTGCAGG

SEQ ID NO:1820: (Length of Sequence = 359 Nucleotides)

CACCATECT CTGCACTOGC NCTGGTACCA GGCCCGCGAC CTCATGCTCA TGAGCCACTT GCAGGACAAC ATTCAGCATG CAGACCAGC AGTGCAGATC CTTTACAACC GCACCATGGT GCAGCTGGGC ATCTGTGCCT TCCGCCAAGG CCTGACCAAG GACGCACACA ACGCCCTGCT GGACATCCAG TCGAGTGGCC GAGCCAAGGA GCTTTTNGGC CAGGGCCTGC TGCTGCGCAG CTTGCAGGAG CGCAACCAGG AGCAGCAGAA GGTGGAGCGG CGCCGTCAAG TCCCCTTCCA ACTGCACATC AACCTNGAGC TGCTTGGAGT TTGTTTTANC TGGTGTCTGC CATGTTCCT

SEO ID NO:1821: (Length of Sequence = 208 Nucleotides)

CCTGGGTCTG TGACCCAGAG TTCCAACACA AAGACACTTT GTACTGGAAC GCTGGAGCCA TTCCAACATG AACAGCAAGA ATAGAACCTG TGCTGGCTGG TCTAAGATCA AACCTCGNGA TGGTGGTTTG AAGTNCTTCT TCAAAGAAAG CTTGAAAATG AAATCTCAGT TAGGCAAGAC AGATAAAAGC AGAGTTATTC TGGTGGCG

SEO ID NO:1822: (Length of Sequence = 314 Nucleotides)

GGATGINITG AGCCAGAGIT TAAGCCTGAC ACACAGGCTT TGGICCTCAC TGAGCTGTCT CCAAGACTGG AACTACTTAG
TGACTCGGCA AATTITCTGC CCCCCACCCC TCATCAAAGC TGCTAGTTCA GATGITGACA GTGTTTCAT GAATGITGGA
ATCTTACTAG TCCAGACTTA CITAGGATGT TGTTGGGGAA GGCACTTGGG ATTITCTGTG TCTTGCATTC ACAGAGGGAG
GCCATTTCAG ATTCAAGAGC ATTKGATTAG GGGATCGTGA GGCAGGGATG CTACTGCGKA TTTCTCTCTT CAGG

SEO ID NO:1823: (Length of Sequence = 344 Nucleotides)

AACAATTIIG TCTITACIAC ATCTTAAAGA ATTAGAACIT GGGITGGIGI AAGIGACTIA CTICCAGGGN ATCATGCICT
ATTICIACCA GCAGGICATA CCCNAATGIC ACACTATCIA TIGTIAACCA TGAATGNIAT TCAGATCIAT TACTITICGI
GAAAAGIGGA ACATGITACI TCCAACCATG GCCTGICACC GTGAGIGIGA TCANCTITNI CCAAAACCAC AIGGGICGCA
GGAGCIAAGG GGIGGIACCC MAATGITAGG GACAGIGITA GGGAAGGGCA AGGGAAAAGA AGIGACINGA TGICTTATGA
GRAACCCGIA AATGGCTTAA AAAA

SEO ID NO:1824: (Length of Sequence = 340 Nucleotides)

GTGAGTGCA GGTATCATGA ACCACATTGT GGACCTGGAG TTGCTAGGAC CTTTTCTGCC ATTACACAGA AAAATCCTCC CTGAGAACAC AGCCATTNGA GGNCACATGG CAGAGGAAGA TAAGACAATA AACAGAGNCA CATAATTATG GCCAGCGTGG GGGCTNACGG CTGTAATCCC AAAACTTTNG GAGGCCGAGG TGGGCAGATC ACCTAAGGTC AGGAGTTCGA GGCCAMCCTG GGCAACATGG TGAAACCCGT CTCTACTAAA AATACAAAAA TTAGCCSGGC GTGGTGGCAC GGGCCTGTAG TCCTAGCTAC TCAGAGGGTT AGGCAGGAGA

SEO ID NO:1825: (Length of Sequence = 357 Nucleotides)

AATTIGGITG TGGCCAAATT CTCAGTCCAA TCACCCTGGC CCAGGGCCTG GCGTGGGAGG ATGTGGCAGG CTCTGTCTCC
TTCTGGGGTT CCTGGTCTGG AGGAGTCTCC CCAACAGCGC CAAAGCTGGC TGTTTTCCGC CCAAAGCCCC AGAACTTTGA

ATGAGAGGCA AATCTACCCT GAATGCACCT CCCTCCTAGG CTGGGTGAGG TCACGCAGAC ACAGAAGGGC AGGACAGAAC TCCCCCATCTT CTGGGGGCCA ATTCGTCTGG ACACTGTGCG GTCANCTTCC TTTTTAAAGT GCCAGTATCG GTGGGGCAGG AAGGGACTCT CAGGGCTGAG CAGAGCCTTC TTCAGGG

#### SEQ ID NO:1826: (Length of Sequence = 207 Nucleotides)

COGGCCCCTT CAGTCCCCAG CCCCTGCCCC AACTCCGACT CCTGCACCCA GCCCGGCTTC AGCCCCGATT CCGACTCCCA CCCCGGCACC AGCCCCTGCC CCAGCTGCAG CCCCAGCCGG CAGCACAGGG ACTGGGGGGC CCGCGGTAGG AAGTGGGGGG GCCGGGAGCG GGGGGGATCC GGCTGACCT GGCCTTAGCC AGCAGCA

#### SEO ID NO:1827: (Length of Sequence = 309 Nucleotides)

## SEQ ID NO:1828: (Length of Sequence = 382 Nucleotides)

ATCTCTGACC ACCCCTCCT CCCCATCCA CCCTITGGTA ACTCCCCCGC CCAGGNCACT GCCCAGATAT ATTCTTCTCC
TTGGGCAAGA AGITCTGGC ATGCAGGTCA AATCTGAAAG GGNCATTTCT TTCTTTAATG AGTGTCAGGG ATGGGGGATG
TGGCTGATGA TATAAGGGGC CCTCCAATCA GACTTTCTAA TCTAACTGAA AAGNTAATTA CAATGTTGAT GCTAAAAAAG
AAGGTTCTGG CAAAATAGAA CTTCTGAAGC ATCATAAATC AGATGACTAA TATTTGTGAT CCCCNTTTAA ATTTTCATGT
GAAGAAGAAT AGGGGATGTA ACTGAAGRAA TGNACTAAAA GTTCTTCTAT GTATTGATAA CC

## SEQ ID NO:1829: (Length of Sequence = 361 Nucleotides)

GGCGCGCGCT CTGGAGCTGG ATGTCCAGGC TGCGGGCGCT GCTGGGCCTC GGGCTGCTGG TTGCGGGCTC GCGCCTGCCG
CGGATCAAAA GCCAGACCAT CGCCTGTTGC TNGGGACCCA CCTGGTGGG ACCNCAGCGG CTGAACTCGG GTGGCCGCTG
GGACTCAAAAG GTCATGGCGA GCACGGTGGT GAAGTACCTN AGCCAGGAGG AGGCCCAGGC CGTGGACCAA GAGCTATTTA
ACGAATACCA GTTCAGCGTG GACCAACTTA TGGAACTKGC CGGGCTGAGC TTTGCTACAG CCATCGCCAA GGCATATCCC
CCCACGTCCA TGTCCAGGAG CCCCCCTACT GTCCTGGTCA T

## SEO ID NO:1830: (Length of Sequence = 180 Nucleotides)

AAGAACCITC CCTCCCTCCA GGACGCCCTG CAGCTGCCCA CTTCCTTCCN CCANCTGCCN CTCCGCGGATG TAAAGAACTG
AGTGGGGAAG GAGGAGGCTC CCACTGGATC CATCCGTCCA GCCAAGAGCT CTTCATCTGC TACAAGAACA TTTGAATCTT
GGGACCTTTA AAGAGCCCCT

#### SEO ID NO:1831: (Length of Sequence = 335 Nucleotides)

AGATCTTCTA TATTCCGACT ACTGATTCAA ATGCTAATCC TGGACGGGCA TGGTGGCTCA CACCTGTAAT CCCAGCACTT
TGGGAGGCTG AGGCTGGTGG NTCGCCTGAG GTCCGGAGTT TGAGATCAGC CTGGCCAACA TGGTGAAACC CTGTCTCTAC .

TAAAAATACA AAAATTTGCT GGGCGTGGTG ACATGCGCCT GTAATCCCAG CTACTCGGGA GGCTGAGGCA GGACAATCAC
TTGAACCCGG GAGGCAGAGG TTGCAGTGAG TTATTGCACC ATTACACTCC AGCCTGGGTG ACAAGAGCGN AATTCCATCC
CCCCACCAAA AAGCG

SEO ID NO:1832: (Length of Sequence = 337 Nucleotides)

GTATITGGAG ATGGGACCTT TGGAAATGCT TTGATTAGGA AGAAGGAGCT TTCATGAACG GGATTAGTGC CCTTATAAAA
GAGGACGCAG AGAGCTCTCT CACACCTTCC ACTGICTGAG GNCACAGGGA GAAGGCCCTG TCTATGAACC AGGNAATGAT
CCCCCAACCAG AACACCTTGA TCTTGGACIN CCCAGATGCT CCANATCTNT GAGAAGCAAA TTTCTGTGCT TTATAAGCTA
TCCAATGTAT GGAATTTING TACAGCAGCC CCAACAGACT AAGNTATTAA TAAAATAAAG ATGTAAGATC TCTGTTGAAA
ATGCACAAAT AATATCT

#### SEO ID NO:1833: (Length of Sequence = 244 Nucleotides)

TCTCTCATTG TAAGCACAAA TTGTTCCGTG TCTGGTTATT AAAATCGCTT TGGGTCTATA ACAGCCACTC TTGTCCCCCC
TTTTAATAGA AAATTGTCAT TCTAGCCTGG ATTTCTCCCC ACTGGAGGTG GAGGGTGGGA AGAGAAGGGA GTCAGCTCTG
ACAGCTTACA AACTGGGAAG TTCTGTGCAT CTCCAGGGAT TCCAGAGTTG AAGATCTGGT TGTTGGAAGC TGGGCGCCCCA
GTGC

## SEO ID NO:1834: (Length of Sequence = 322 Nucleotides)

TCCTGTACTA CACCTITICC AACATGGCCA TGITGAACCA CCTGGGCAGG CCCCGGTCCT GCAGTACCTG TACTACCTGG CCCAGATCGG CATCGCCATG TCTCCGCTCA GCAACAACAG CCTCTTCCTC AGCTATCACC GGAATCCGCT ACCGGAGTAC CTGTCCCGCG GCCTCATGGT CTCCCTGTCC ACTGATGATC CCTTGCAGTT CCACTTNACC AAGGAGCCGC TGATGGAGGA GTACAGCATT GCCACCCAGG TGTGGAAGCT TCAGCTCCTG CGATATGTGT GAGCTGGCCC GCAACAGNGT GCTCATGAGC GG

#### SEO ID NO:1835: (Length of Sequence = 178 Nucleotides)

ATGAAAGCAC AAAAGAAGTC TATCAAAAATT ACAAAAACTT AAAACCGAGT AAACAAAACT TCAGAAAGAA TGAAAACAAT TGGAAAATAA CITCAAGAAA AAAATGTAAA ATGGAAACAA TACAAGANCA ATTTGTGCCC TCTGAAAAAAC AGAGGTTAAA GTCAGAATTT TTTTGTNC

## SEO ID NO:1836: (Length of Sequence = 377 Nucleotides)

CGCCTGGNAC CACACCCAGC TAATTTTTGT ACTGTTAGCA GAAACAGGGT TTCATCACGT TGGCCAGGCT GGTCTCGAAC
TCCTGACCTC AAGTCACCCA CCTGCCTTGG CCTCCCAAAG TGCTGGGATT ACAGGCATGA GCCACTGTGC CCGGCCTTTA
TGCTGAGTTT TAAGGGCTGT ATGAGACACC AGGTGGTGGG AGGGAGCTGT TTTGAGAGCA GGGAATTTAG GATACTTAGG
AAATTAGAAA ATTAGAGAAG TCATAGGATC TTGGAACTAA GGGAGAACCT TAGAGTCCTG TGGAGCAGAA CCCAGCATTT
GTATGTGGAG GAAACGGAGG GCCCAGAGAA GTTGTGACTT ATACCGGGGT CAATCTT

## SEO ID NO:1837: (Length of Sequence = 388 Nucleotides)

GGAGAGAACA AACCCTCTTA CTGGCCTTGG GCCCATCCCT CTTTCTCCCA CACTGCTACT TTTGAGTTAT CTCATTTTGC
TCCCAATAGT CAGCCTTGAC TTTTCTGGGC TTACCTGGGC ATCAGGGACC CATGTTGCAC ATTCAGTTGT CCCGATTATG
TCTGCCTTAG AGCGTCTCCT AGGGCAGCCA GTCTGGAACA GTCAGTCACC TAGGGTCCTG GAGCTCCTGC AGTCTGCCAC
TCGCTNCTTC TGCCTGATAA CAAATACTAT TCCTTTTATC CTTGCAACTC GACCCAGAAA GAGGTGGCTG TCAATGTCCA
AGGCCCCTGG GAAACGAAGG ACTGGAAATN TGAAACCACT GGGCACAGGG GGAATGGGTG GGTCTGAG

#### SEO ID NO:1838: (Length of Sequence = 369 Nucleotides)

TCTCTTTATG CCAACAATTA ACTGGGAGCT AGGTTAAATT ATTTGGCTAG ATAAAACTAC CAGCTAGATG GATTTATTTG GTGCCCTCAT ACAGAATGCT GTAGAAAATG TAAAGAAGAG AAAGCTCCTT CCAGCTAGAA GCACATGGGA CTGCTTCTAG

#### SEQ ID NO:1839: (Length of Sequence = 359 Nucleotides)

CNNGTAGGGA AGAGGACTIT ATTGGGATGT TAGTAGGGAA ACATGAGAGG GTGAATTCCA GGGAATAGAC ACTAGGACCA
AGGTGGCGGT CACCTTAAAG AGCCATAAAT AAACTTAAAA AATTAAGGTG AGGAGGTGCC ACGTGGGGAG GCTGCTGGGA
CTATCTGGGA ATTCTTAGGG ATGGAATTTT GGAATTGGAA AGGGGAAATA AGAATTTCCA GCCGTNTCAC AAAAGGGTGT
GAAATGATCA CTTCAAGACT CCCTGCTGCC CTAGGCTGGG AGTTGGGGTT CTGGGGCTCC AGGAAGAGG GAGGTCTGGG
CTCGGCTTNA AGGGGTGAAG AGGGCCCGGT CAAGGTCGT

### SEQ ID NO:1840: (Length of Sequence = 360 Nucleotides)

CCAATGAGCC CAGCCTGACA CATATGGACT GCTCGACAGG TCCACTGTCC CACGAGCAGA AGCTGTCACA AAGCTTGGAA
ATTGCCTTGG CATCCACCCT TGGCTCTATG CCCTCCTTCA CGGCACGGCT GACCAGGGGA CAGCTCCAGC ACCTTGGCAC
AAGAGGGAGC AACACTTCCT GGAGGCCTGG CACCGGCTCG GAGCAGCCTG GGAGCATCCT GGGCCCCGAA TGTGCCTCCT
GCAAAANAGT ATTTINTCCC TACTTCAAAA AGGAGCCGGT GTACCAGCTG CCCTGCGGCC ACCTCCTGTG CCGNCCCTGC
CTGGGINAGA AGCAACGGTC CCTGCCCATG ACCTGCACAG

#### SEQ ID NO:1841: (Length of Sequence = 332 Nucleotides)

GIGIGATICC ATTIATATGA AATGICCAGA ACAGGGAAAA CCTATIINAG ACAACAGAGA CACAAAGICG ATCAGCAGIT
GCCAGGGGAG GAGGAAGACG GGAGGGGAAA TGATIGCTIC ACGGGTGAT GACAGAATGI TCCAGAACGI GACAGAGGIG
GIGCCIACAC AACTITCIGG ATGIACTAAA TGCCGCTGAT TGITCACTIT CAAGIGATIG ATTITTAGGI TATITGAATT
TCATCICAAT TAAAAAACCC AAACACGCAA ACTGCTCCCG CCAGCTTCAG CCCCGAGGCA GACGGCGCAN CCGTGGGAGG
GATGCTGAGC CA

#### SEO ID NO:1842: (Length of Sequence = 246 Nucleotides)

GCIGGICAAG GCAGAGITTA CIGAACININ AGITICCICC TGCACACACC GGGCATGACA CCITCAAGIC TGNCCAGCAG TGGGICCAGA AAGIACCCIG TGIGCCITGG ACGCAGAGGC TACAGITCIN ACTGIGIGGC ATGGGAGCCI TCANAGIGCC CTCGGGAGCI GCCCCTGGTC TITGICTGNA AAGGIGACIG GGAGGNIAGA AAAAGCAGCG GGCTGGCATT GITTCGGGGG TGGGGI

## SEO ID NO:1843: (Length of Sequence = 313 Nucleotides)

ATTIATIGCA AACAAAATTG AGGTAAAAGA AGCTGACCCA GAACCCACGC CCGTCCAGGC TGGGGAAGTC TCTACTCGCC CCACACCAGG CCCCGAGCAC CGCGGGCCCG AAGCAGCCC CAGAGGACAG ACGGGCCCTG CGCACTGAGG TAGCTGCATC TTAAGCCCCC ATGAGTACAA CTGCCCAGGG CTGCCCAATT CCCAGAGGG AGGAGGAGAG AGAGGCAGGC AGGGGGAGCC CCGGCTTCAG GTGGGGCACA CCCCANACCC TCAACAAACC TTCCAGCCTC TTCGGGCTGG GGCACTTCCT GCC

## SEO ID NO:1844: (Length of Sequence = 274 Nucleotides)

CTTCGCTTCT NAAAACCAAA CTCCAGCCGC TGCCAGTCGG GACTTGGTCG CCCGNCGCTG CCAGAATGCT CCACTGCCAG
CCGGCCCCCC TGCCTCGGTT TCCCTTCTGT TTAGTGGCGA CACAGGCACC CAGCTTTGGG GTGGTGCTGA CGCTCCCAGG
GGTGCCAGGA GCCACTGGGA CAGGGTGAGG CTCCTCGAGG TGCCCAGGTC TCCAGGGAGC TTCTGGNCCA
AGGNCGTCTG AGGGATCTGC TCCTTAACCN CCCA

SEO ID NO:1845; (Length of Sequence = 441 Nucleotides)

SEO ID NO:1846: (Length of Sequence = 255 Nucleotides)

ATGAATICAT TGIGIATITA TTATICACAG TIAATCACIA CCTACCAAAT GCIATCCGCA GAGTTAAAGG ATTAAGIACA TAGGICITTA TITAAACACT GATTITITIT TITAAATATA TACACACAAA ACTTAGITCA GCAAGGCITC ATGATATACA CCAATTCCAA AATAAAACAA TCAAATGGIC CNGGNGIAGA ATGCCAGATT CCTTITATCA TCIGCGAGGA AAAGAGAAAGC AGGATGAGGA AGAGT

SEO ID NO:1847: (Length of Sequence = 3: CAGGGCACAC GCAGGACCAC TGTGGATTAG AAACCCAC: GGAGCCAAAT CTCATTTGTN ACCCTCAGTC ACCACCCC: TGCACAGGGA GAGAATTINT CCCCGGATAC CCCTGAGG: GTGCAAGGAAA CCAACGAGGA TGCACGAGGATAC AAACGAAG

:leotides)

FICACICG CAACATICCI CCCACATCCA CATCCACGAC

BATGGAGC CNCIGGITAC GNCATGGATG ACAGGIGICA

TGCACAGGGA GAGAATTINI CCCCGGATAC CCCTGAGG: GGNCCAC CCCCAGGCTA GGGTGGGAGG ATTTAGAGCA
AGGCAAGAAA CCAAGGAAGA TGGAGCATCC AAAGGAAG: AGGCAGGC INGGGGATTG AGGCCAGGAA GGGCT

SEO ID NO:1848: (Length of Sequence = 311 Nucleotides)

CCACTGGCCT ACATTATAGA AGIGCTGTAT GCGGACCCTG CCATTGTCAT CATGGACGCA GGCCATGACC ATCATCACCA CCCATTTTNT TGTCTGAAGA GAATCCAACT GCTACCCAAC CATCTGTGTC TGCACTCAGC TCAAATTCTA CATCAGCCCC TATCATCCGG TAGCTGAGGA AATAGTCACA GGTCTCTGCA TTACAGCCTG GTTTGCCATA TCTAAAGCAT CCCTTAGTTT TCCCACAGTC GTCCACTTTG ATTTTGGCAA ATGGNTCCAC AGGAGAAGCA GCAGGGCTNN GTGTCGGGTG T

SEO ID NO:1849: (Length of Sequence = 318 Nucleotides)

GTGAGTCCCC CAAGAGGGGC CTCAGTCACG AATGTCGATG ACCAGTGGGC ACAGGTGGAG TGAGTGCTTG ATGCCCATGG
TGAAAACCAGG GATGTGGGGC TTGTGCACAG TGANCTGCTG GACCTCGTGG GAGCCGGGGC CAGGCCGTGG CGTGAGGTCC
AGAGGGTAGG CGAAGGCTTG GCCATGCTGT AAGTAGGGCT GCGGTTCTNA TAGATGGATG GCTCAGGTCG GGCGTACGTG
GTAGGTCCAG GGCCTCCTGC CACATCCTCC TTGTAGANCC AGTTCTTGTC CCTGGAGGCC AGACTNTAGC AGGGAGCA

SEO ID NO:1850: (Length of Sequence = 406 Nucleotides)

GGAAGCCACT GATTITCCCT CCAGTATGAT GATTIACTIT AAAAATGAAC CCAGAGGGAC GGGCATGGTG GCTTATGCCT
CTAATCCCAG CACTTCAGGA GGCTGAGGCA GGCAGATCAC CTGAGGTCAG GAGTTCGAGA CCAGCCTGGC CAATATGGTG
AAACGCCTGT NICTACTGAA AATATAAAAA TTAGCCGGGT GTGGTGGTGT GCACCTGTAG TCCCAGCTAC TCAGGAGGCT
GAGCCAGGAG ACTCACTNAA CCCTCGTGGT GGAGGTCGCA ATGAGCCGAG ATTNCACCAC TGACTNCAGC TTTGGCAACA
GAGCAAAGAC TNCGTCTTCA AAAAAAAATA ANAAGGGAAA AAAAACCCNG NAAAAGCTTT TTTATTGTTA AAAACAAGTG

SEQ ID NO:1851: (Length of Sequence = 328 Nucleotides)

CTGAGGGGCA TITITITATIA TAAATITAAT ATGGTTGATT AATGAAAAAT GACAATGAAG TACCAAGAAA ATGTTTGTCA
ATATAAAAAT TITAGCAGCA TITCCATAGT TICAGGCTCC AACATTAGTC GTACTTCCTC CCTCCCGCTA TCAAAAAAAG
AAGAGACTCC AATGGGATGG AGTAGAGCCT GGGGGTGTCC AGCTTTGTGT GGGCCTCAGA GAAATACTCC ATCCAGCATC
CAGGATTCTC CCTCCCTCTC ATCCCTGAAG TGCTAGAATG TCAAAGCACA GAAAAAGCCT CCTTTGTGCT GACATTGGAG
ACAAGGAT

SEO ID NO:1852: (Length of Sequence = 174 Nucleotides)

GOGCAGGACG GCTCTNGGCC CTTCCTGGCT GACTTCAACG GCTTCTCCCA CCTGGAGCTG AGAGGCCTGC ACACCTTTGC
ACGGGACCTG GGGGAGAAGA TGGNGCTGGA GGTTCGTGTT CCTGGCACGA GGCCCCAGCG GCCTNCTGCT CTTACNAACG
GAGCAGTAAG GACG

SEO ID NO:1853: (Length of Sequence = 252 Nucleotides)

GAGCCATGCA CACACACGGC CGCATAGTCA CACACGCATA TCTACATGTC CCCCCCACAT ATACACACAC ACATATACAT
GGACCCATGC ACACACACAG CTGGATATTC ACACACACTT GCACATCCAC TCCATATACA TAGACACGCA CAGACACAGC
TGCATGTTCA CACACGNGGA CGTGCACACG GACACAGACA TGCATGCATA TGCGCACAGG TGTGTACAGC CTCAGTGGTG
GGGGTTGGCT GT

SEO ID NO:1854: (Length of Sequence = 288 Nucleotides)

GGAAGGAGGG CTAAACAATG GTCTGCAGCT CAGTTACTCC TCATCCTCGC CTGGGCCGGG CCAGCATCCA CTCCCCTTCC
TGTAAAGCAT TTGGATTTCC TTGGGGAAAC AGCCCTGCCC TCTGTCCTGA TCCATGTGTT TTGAGATCTC ACAGTAGCAA
GTGACTCATG TTGGTTCAGT GATTCCCAGA GGCTGATTCA AGGATGTCCC CAGCTAGACC CAGGATGGTG GACTCCAGAT
TGGGGCACTG GGCAGTTTCA CATCCTCAAG GCTTGGCCAT CATCGGGG

SEQ ID NO:1855: (Length of Sequence = 293 Nucleotides)

AAAATGCTTG TIGATATTIT AGITATTAAT TCATATTAAC TITGGCTGAA ACTITTAAAT TCTATTGTGA ATAGTCAAGT
AAAATTTAGA TIGITACATT CIGGGTTAGT ATTAGATTGT TITTAAGATT GITTTAAACA AGATGTTTIT AAGATGAGTT
TTAAATAGTT CICITAACAC AAATAAAGCT TAATATGAGT ATTIGAAGGA AATTATCCCA AACCATTCCA GITCCTGGCT
GTGAAAGGCT TITCCAGGGC TAATAAGTTT TCCACTTCAG CCGTAAGTAG GTG

SEO ID NO:1856: (Length of Sequence = 308 Nucleotides)

ATCTTAGCAG AATCTTGAAA AGCCCAGAGA TCCAAAGAGC CCTTCGAGCA CCACGCAAGA AGATCCATCG CAGAGTCCTA
AAGAAGAACC CACTGAAAAA CTTGAGAATC ATGTTGAAGC TAAACCCATA TGCAAAGACC ATGCGCCGGA ACACCATTCT
TCGCCAGGCC AGGAATCACA AGCTCCGGGT GGATAAGGCA GCTNCTGCAG CAGCGGGCAC TTACAAGCCA AATCAGATGA
GAAGGCCGCG GTTGCAGGCA AGAAGCCTGT GGTAGGTAAG AAAGGAAAGA AGCTGCTGT TCGTGTTA

SEQ ID NO:1857: (Length of Sequence = 299 Nucleotides)

GGGGAAAGCT AATTGGCAAT AATCCTTGCG GGAAGGTCAG ACTCCTCTCT TACAGATCTA GGGAAGGCCT GGTAAAATGA
TGGCTCTTTG GAAAATGCCA AGCTCCTTCA GATTCCATAC CCTCTCGGGC CCTCAAGCAT AGGCAACGAA CTTGTTCCTG
GCTTCACGNT TTCTCATTGA ATCAAAGCTC TCATGCATGG CCTGGATTTG TAAACACATG CTGGCTGCCA GCAGTGGCAA
GTTAGCCTCC TGACCCACTT CTCTCCTGCT TTCACTCTGG TGTATGAAGG GGGATGAGG

SEO ID NO:1858: (Length of Sequence = 295 Nucleotides)

TAAGACTICC TGITAGIAAA AGCIACCICA TGAAAAGIAT TGATGITATI TGCCAACATT TAGACTAGCT TTIGITACCG
TTICAGITAT TCAATTIAGI CAGCACATGI TIGAGIGTCT TACIGCAGGI GAATAATCCA TGATTICTGC CCCAGAGIAG
TTCATAAGAC TGGTAGGATA CATAGATTIG TAAATAAATA ATTATAATTC TGGGCAGIAA GIGCTGCTAT AGAAGICTCT
ATAAAGCAAT GIGCAAACAC AAGAAAAGGA GCCGTTAATT CCTTATAGGG AAAGG

SEQ ID NO:1859: (Length of Sequence = 326 Nucleotides)

CTTTATTIAG TECTGGGGCT TIGGAAGCAA AIGTACCIGA GITIGAATCI CAGGGATAAC CITITGACIG TGGCCCIGGG
TAAGTIACIC ACIGICTCIG AAACITCAAG TICCTCATAA AIAACCIAAG AIGGACAATC AIAACICTCI CIIGGAITGA
GGTAGGAGAA TAIGGIGGAG GCAGGGAACC GAAGGCCATT TCACTCCAAC TICCIAGAAC TAAAITAAAA GGAAAACCCI
AAITITCCAT GCCTAAGIAA CAAAAGGACC AAAGGITACT CCGITIGCAA ACICCCACCT TITCIGCAIG GCAGAIGGGA
AGITGG

SEQ ID NO:1860: (Length of Sequence = 294 Nucleotides)

CCACCCCTAA AAGCACCTGG CCCCGCTACA GCAAACCAGG TCTGTCCATG CGGCTGCTGG AATCAAAAAA AGGCCTCTCC
TTCTTTGCGT TTGAGCACAG TGAGGAGTAC CAGCAGGCTC AGCACAAGTT CCTGGTGGCC GTGGAGTCTA TGGAGCCGAA
CAACATCGTG GTTCTGCTCC AGACGAGCCC TTACCACGTT GACTCACTCC TGCAGCTCAG CGATGCCTGC CGCTTTCAAG
AGGATCAGGA GATGGCTCGA GACCTCGTAG AGAGAGCGCT GTACAGCATG GAAT

SEQ ID NO:1861: (Length of Sequence = 183 Nucleotides)

TGAAGACTCC TAATCTAGTG CCTOGAGAAA AGCAGGCAAC AGAGGCCTGA TGTCTGACAT TGACTCTTTG GAAGATTAAA CTTCCTCACA GATTTINATA ATNACTTTGG AAATNATGAC TGATCGCCAG GCTGTTCCTT GGGTGGACAG TTTGTCTTTT

SEQ ID NO:1862: (1 th of Sequence = 296 Nucleotides)

TTCGGCTTCT TAAAGITC.: CCCATCCCTC CTAAGGTCTA AGATGATGCA TTAAACACAG AGGATGCCCA ACAGTGGCTG
ATGGAATTAC CAAGTAAAAT CTAAGAGGTA GAAAAATGTG GTAGTTTTTA AATTTTATTT TATTAGTATG CAGGTGGGAT
TCAGAGACGT AAGATCTTAG CCTTTATTTT CAACATCTCC CATGCATGTC AACAAAGATT ATCAAACACA GGAAGTGAAT
AAAATACTAT GTAGACACTG ACCCTCTTTA TATAAAATGT GATTGATCAG GTCTGG

SEQ ID NO:1863: (Length of Sequence = 259 Nucleotides)

CAAAACAAAA AGGGCTCAA ACCAACAGGA AGTCAGCCCC ACCGCAAGCC GGACTACAAC TAACTCGTGC TCTCCACGCT CAGGCGTGGA AGCCAAGGCT GTGCCAGGCC TGGCCAGGCC AAGCAGGATG ACAGCAAACG CATTCTGAAC GTNTAGCAAT CAGGTCCCCT GTAATGTGCT TGGAGAGTNT GGACAAGGGC CGAGATGACG AGCTATGAGC TGTGGAAGGG AATGGGGGGAA GCAGAAGGGC ACAAACAGA

SEQ ID NO:1864: (Length of Sequence = 290 Nucleotides)

ATCCTTACCA ACAATGCTTC CCAACTGCCT CAAAGCTCTC CTAAATGAGA ACATAGTTCT TTCTGAGCAA GGTCCTGTGG
ACCATGAAGA ATGTCACCAA GCTCCCCTCA GAGTCAGCGG GAGCTCAGCC AAAGCACAAG TGCAGTGCCC AGCTCCTCCC
ACTCTGCACC TGCTGCCTCA NACTCCCCCAC GCTGAGCCCCA GGCCCCTACC CTCTGAAGGT GTTTCCCATG TGATTCTGAC
ACACACACCC CACAAGAACC AGATGATCTA TGNCATACAG CATTTAGCTA

SEQ ID NO:1865: (Length of Sequence = 236 Nucleotides)

CATTICIGIT ACATIGAGAC TICAGICACC AACATCIGGT GGCAGAGATA CAGGIGITATG AAACATTICT AITTACCCAA
ATATGCCAGT TCCCAAATAG GATGACTGCA TITAGIGITA AACTGGCTTT TCTCATTAGA TACTCTAATT GAGGAATATT
TAGCTTCTIG AATAGAAACC ATCCAAATGA TGTTTTTTTT TIGATATGTC TGTAACTATA AAAATCAGCA AATAAG

# SEO ID NO:1866: (Length of Sequence = 424 Nucleotides)

TACEGGAAGG CGGTGTTTGG AGGCTGGAGC CGTGGCAACG TCATTGAGAA AATGCTCACA GACCGGCGGT CTACAGACCT
TAATGAGAGC CGCCGTGCAG ACGTGCTTGC CTTCCCAAGC TCTGGCTTCA CTGACTTGGC AGAGATTGTN TCCCGGATTG
AGCCCCCCAC GAGCTATGTC TCTNATGGCT GTGCTGACGG AGAGGAGTCA GATTGTCTGA CAGAGTATGA GGAGGACGCC
GGACCCGACT GCTCGAGGGA TGAAGGGGGG TNCCCCGAGG GCGCAACCCA GCACTGCCTC CGAGATGGAG GAGGAGAAGT
CGATTCTCCG GCAACGACGC TGTCTGCCCC AGGAGCCGCC CGGCTCAGCC ACAGATGCCT NAGGACCTCG ACAAGGGTCA
CCCCTCCTCC ACCCTGGACT GGCT

#### SEQ ID NO:1867: (Length of Sequence = 256 Nucleotides)

AAACAATTGA AATCCACAAG AAATTACTAA CAGCACGTGT TTACGTTTTA TCCTGAATCA TACATTTTAA CAATTCACAG CTACAGGAAA TCTAGAACAA AATCAAATAT TCATCACGTT GGGTTGAAAA GTTGGAAGAT TTTGCATCTT ATTGAAAAGA ATTTTTCAAA AATGTTTCTG TACAAATGAA TGGAATTGCA CCAGGCTGCC CATGGACACC AGGTGTGGCC GCTTCCCAAC GGTCACCCAC CAGCTT

#### SEO ID NO:1868: (Length of Sequence = 297 Nucleotides)

CAAGGITITI TITITATITGI AGCTATAGCT ACAACTIGGC AGCATGGGG AGGGITGGGAA TGTCCTGGAG GGTCTCCCAG
CCCTCCGCAA GCAGAGTACA AAGGCTGCTC GGGGGGCCGG CCGAGGGCGC GGNIGCAGCA GTCNAAGCAG CACCACAGGCG
CCTGGTGCCC CCCTCAGGTG GGGTGTCTGG AAGACGGTGG GCAATCCCTG CAGGATGGGC GAGGACCAGA CCCCAGGGCG
GGGATCCTGC ATCCCTAGAC CATGTTGGGT CCTGGGTCAN GGCACCINGG NATGCTA

#### SEO ID NO:1869: (Length of Sequence = 470 Nucleotides)

CAGACATCTG GAGCATGGGA CTGTCTCTGG TAGAGATGGC GGTTGGGAGG TATCCCATCC CTCCTCCAGA TGCCAAGGAG CTGGAGCTGA TGTTTGGGTG CCAGGTGGAA GGAGATGCGG CTGAGACCCC ACCCAGGCCA AGGACCCCCG GGAGGCCCCT TAGCTCATAC GGAATGGACA GCCGACCTCC CATGGCAATT TTTGAGTTGT TGGATTACAT AGTCAACGAG CCTCCTCCAA ACTGCCCAGT GGAGTNTTCA NTCTGGAATT TCAAGATTTT NTGAATAAAT GCTTAATAAA AAACCCCCGC AGAGAGAGCA GNTTTTNAAG CAACTCATGG TTCATGCTTT TTATCAAGGG GATCTNGATG CTGAGGAAGT NNGATTTTTT CAAGGTTGGN TCTGCTNCAC CATNGGGCTT TAACCAGNCC CGGNACAACC AACCCATGGN TCNTGGNGTT TAAGGNGTTTT

## SEO ID NO:1870: (Length of Sequence = 344 Nucleotides)

AGAGATTAGA TITGTTAAAC ATCTAGGITA AAATGGITAA AAGGATTTC ATACAATTTT AGGCACTATA CACGITGITT ACACAGCAT TGGTACTTGG ATATGGGGAA AGATAAATCC GACATTTTAA TATCTTGATC AATTTGTGAC ATTCAAAATA ATTCCATTTA AGAAACATTA ATCAAAACTT AAAGAGACAT ACCACTAAGT ATCCCACACA GIATACTGAA AATAAATATA GNAATACAAC CAGAAGTCTA CAGNTCACCA CAGTAGACAG ACTGGTGAAG NCCCAGCTTT TCATGGGCAG TNAAGGGCTC TGGGCTAGAT TTGGGTGTCA ACTG

### SEQ ID NO:1871: (Length of Sequence = 278 Nucleotides)

GGATTTATTG TCATTCCTCC AAGGTCAGCA GGGGAAGGGG ACACCAGCCA CACTTCACCA CAGGCATAGG TGGCACTGAG CCACCTGGCA CTATCTCCAC GTGCTCCACA CGGAGGGGTG CCTTCTCACT GGCAGCAGCT GCACTTCTCT GCTTCTGCCT

CAGCIGCCIC TCCGCCITIG CACACACAGI CCITGGCACA CITCICACAC INCGCAGGCA GCAGGAGCAG CAGCICITCI TGCAGGAGGI GCATTIGCAT CCCTCGCACI TGCAGGAG

### SEQ ID NO:1872: (Length of Sequence = 271 Nucleotides)

CTTGCCATCT TCACAGCCAG AAGCITCCTT GCTTCATGCG CAGACCCTCG TGACTCCCCT TCCCTTATAA GGGCCCCCAT
GATTACTCAG GGCCCACCTC AACCATCCAC GGTCATCTCC CCACCACGAA ATCCTGAACT GAAGCACAGG CGCCGGGTCC
CTTTTGCCAC GCAAGGTAAC ACTTTCCCAC GTCCTGGGGT TCCAAACCTG CACATCTCTG GGGGCTGTTA TINCACCCAC
CGTCATCAGT GAGGGGCCTT NAGGAGGGGC T

## SEO ID NO:1873: (Length of Sequence = 332 Nucleotides)

CAGGGIATAG TGCAGTGGCG CAATCTCGGC CCACCACAGT CTCGACCTCA TGGGCTCAAG TGATCCTCCC ACCTCAGGCT
CCCAAGTAGC TGGGACTACA GGCATCCTCC ACCATGCCCA GCCAATTTTT TGCATTTTTC ATAGAGAAGG GGCTTCACCA
TGCTGCCCCAG ACTGGTCTCG AACTCCTGGG CTCAAGCCAT GGAATTGCCT TGGCCTCCCA AAGTGTTAGG ATCACAGCCG
CGAGCCCCTG GACCCGGCCT ATAGTTTTTG TTTCGCTTTG TTTTTGTTTT TTGAGATGGA GTCTCACCCT GTCANCCAGA
TGGGAGTGCA GC

#### SEO ID NO:1874: (Length of Sequence = 317 Nucleotides)

CTCTCCACCT CAACCTCCAG CCCACCTCCA GGCTGGGGAA GGGGCTGAGT CTTCCCCTCC CATACATACC TCACCCGGCC CCCAGCCCAC AGAGAGGCTG AGGGAGGGGC TCTGGGTCCT CCTCCATCCC TGTACCTGCT TCTTCCCTCT TCATTTCCAC CTTCTAGATC TTTCCCCCCA CCCAGCCCAC CTCCAGGCTG GGGAAGGTGA GGAATTCTTT CCTCCCACAC CCTACCCCAC CTCCACCTGCA GAGCCATGCG TGAACAACCA GACCCACAAC CCCCGACCCT GCAGGCT

## SEQ ID NO:1875: (Length of Sequence = 185 Nucleotides)

GTGTTCCACC CACCTCGGCC TCCCAAAGTG CTGGGATTCC TGGCGTGAGC ACGCTGGGCC TGGACAGTCT GCCCCTAGAT
GAGTTGCCCA GCACGGTACA GCTACTGCCT GCCCCGACCC CAGCCCCTGA TTCTACCGCC GCTCGGCAGG GGGACGGCCA
GGGAGAGGTC CAGCCGCGCG GCAAG

## SEQ ID NO:1876: (Length of Sequence = 214 Nucleotides)

CCTGGGGACA AAATAGTCAG CAAATTCTCA AGGGGAGAAA ATAAAGTACT TCCCTTCTGT TAAAAAAAAG TCAAGAGACA AATCTTTCCT CCCCCATTCT CACTAATAGT TATTGAAGGG GAAAAAAAAA AACCCCACAA CTTTTTAAAC TAAAGATAAA AACAAATGAA AATGAATAAG ATCCAAAGAA TGTCTTTTGT TACTCTGCCT TATG

# SEQ ID NO:1877: (Length of Sequence = 340 Nucleotides)

TITICAAGAAG AAGAAGTIGA ATTIATCAGT GIGCCIGICC CAGAGTITICC AGATTAGTAT CCTGCCAACA TIGITCATGA
CTITIAACAAG AAACTIACAG CCIATITIAGA TCITIAACCTG GNTAAGTGCT ATGIGATCCC TCTGAACACT TCCATTGITIA
TGCCACCCAG AAACCTACTG GAGTTACTTA TITAACATCAA GGCTGGAACC TATTIGCCTC AGTCCTATCT GATTCATGAG
CACATGGTTA TITACTGATCG CATTGAAAAC ATTGATCACC TGGGTTTCTT TATTITATCGA CTGTGTCATG ACAAGGAAAC
TTACAAACTG CAACGGGAGG

SEQ ID NO:1878: (Length of Sequence = 326 Nucleotides)

GAAAAACAAG GAAAATAGGC AACAACCTGC AATGGACACT TTTCTCTACA GAACCTTTTC AACCCTGAAT TGAATTGTTT
CCTATTCATT TNCTAATAAA AAGTTACTTT GCAAGATATA AGGAAATACT GTCCCAAAGA TTTTCACTAG TCATTCAATC
CATTAATAGG ATTTGAAAAG GCATCATTAC ACAGGGTTGA AAATACTCTG GAATGAGACT GCTTTACAGT CAGAATGCCT
GAGTTTTGAG GCACTGTTAC TTCTAAACAT CTCTAAGTTT CTATTTNCTC ATCTAAAGGA GTAATATTAC TTTCCTTAAA
AGGTTG

SEO ID NO:1879: (Length of Sequence = 222 Nucleotides)

GAAAGGGAGA GGTTGCAGCG AGCCAAGATC GTGCCACTGC ACTCCCACCT GGGTGACAGG GCAAGACTCC ATCTTAAAAA AGAAAACCCA GGAGTCTTTG GTTAATGTAG TGCAGGACTC TGAGCTCCCG GGAGGACCCT TCCCTCCCAG ATGAACTGTG ATGGACCAGC CCAAAGGAGG GGAGAGAGCA CTINGGCCAT AGTGGTGGTG GATCTTTCTA AC

SEQ ID NO:1880: (Length of Sequence = 244 Nucleotides)

GACATGAATG GTATCCTCCT GGGGTATGAG ATCCGCTACT GGAAAGCTGG GGACAAAGAA GCAGCTGCGG ACCGAGTGAG
GACAGCAGGG CTGGACACCA GTGCCCGAGT CAGCGGCCTG CATCCCAACA CCAAGTACCA TGTGACCGTG AGGGCCTACA
ACCNGGCTGG CACTNGGCCT GCCAGCCCTT CTGCCAACGN CACGACCATG TAAGCCCCCCT CCGCGGCGAC CTCCTGGGCA
ACAT

SEQ ID NO:1881: (Length of Sequence = 156 Nucleotides)

GTACAGGGA GAGTTGAGCT GTGACAAAGT CAAACACAGG CCTTGGCCAC CCACAGGAGC TCTGCAGCTG GGGTGGTCTT GAAAGTTGTC TCAGTGAAGG CAAGGTGCTG AGCTTATTAC CCCAGCAGTC ATTGTATTTA GGCTCCGTGT GGTACC

SEO ID NO:1882: (Length of Sequence = 210 Nucleotides)

TTTTTTTGA AACGAAGTCT CAGTCTGTCA CCCAGGCTGG AGTGCAGTGG CACGATCCCG GCTCACTGCA ACCTCTGTNT CCCAGGCTCA AGCTAGTCTC CTGCCTCAGC TGCCCGAGCA GACGGGACTA CAGGCACCCC CACCACGCCC GGCCAATCTC CAAATGGTTC TTTTTTTCCG GAGTAGTAAG TTACAATATG GGAGATTATT

SEO ID NO:1883: (Length of Sequence = 214 Nucleotides)

GIGATGAATA CATCCAGTIT TCCAACCACA TTCCACCAGG TGGGTGTTTG GCTGTGGGAC GCATTATGTA ATCTTCGTTG
CCAGGAAATT TACCTTCCTA ATTACATTTT GCAAATGTTC ATTTGAAGCC GCCTTCTTGG AGCTCACAGT AACTAGGAGG
TGGCTGCTGG AAGCCCCAGG GCACCGTGGG AGGGACAGGG GAACGTCCCA GACC

SEQ ID NO:1884: (Length of Sequence = 211 Nucleotides)

ATCTTTCGCT CTATGTGCCA TCACCTGGAC ACTCTAGGTA ATACCCCCTG TTGGGCAGGG GTGAGCTCCC AAGGCCTCAG GCAACCCAGC TCCCATGACT TTGCTGGGCT CAGCCCACAT AACTGTTCTC ACAGGATAGA GTTGTACACT GGTGCTTACA GCTTTCCTGG GCCAGTGTTG CATGCTGCCA GTGGCTGCAG CAGCAGCCCC A

SEO ID NO:1885: (Length of Sequence = 212 Nucleotides)

ATTAGCTGAA TTCGCGTGTG GCGGTTTGGG TAGGCAAAGG AGACATCTTG GAACTGGACA AGGCCCTCCA AGTGTAAGGG
AGTCAACAGA CCACTGGGTG GGCAGCGAGG GGTGCGGTCC AGGTACTCAA ATATTTTCTC TGAGGAGCCC ACAGCCTTCT
GTACTCTGGG GTAGATGGAG AGCAGTACCT CCACAGCCTG GGTGAACTGC AT

SEO ID NO:1886: (Length of Sequence = 208 Nucleotides)

CATCCGCATA GIATITACAT CATGGGTATA GGCAAGINCT ACAAATCAGG NCITINCCIT GGGGATGGAT GITTGGAGCT
AGTTTACCAG CACACCAGTG GGTAAAAGIG AACAAATACT TTTTTGATCC CACAGAATCT TAAAAAAATAC TTTACTTCGA
AAATGTCTCT ACTAAGTAAT CATATATATA TATATATNIG TATATATA

SEQ ID NO:1887: (Length of Sequence = 332 Nucleotides)

CTCGTTCACT GCCCGCCAAC TCCCATTCCA ACTTCCTTTT TACACTGGAT GTTTCTATCA CATCCTGAGG ACCACTAACC
CACCAGCAAG TCTCCCCCTG ACACACATTC ACGTAGGTCC ATACCCTTCA GAGTCCTAAA GGGTTAATGA GAAGCCACCT
CAGCTTTGGT GAATGGAGCC CCAGCCCCAA ATCCCCTCCC CTTGCAAATA TGGGACAAGT AGGGAGAGTC TGATGGAGGC
ACCAGGACAA CTACAACAAC CTCTTACCCC TCAGCTATAG ACACCTAGAT CAGGACAGAG GGATGCATAT GCCCTCTCCA
CCTTAACACC AA

SEO ID NO:1888: (Length of Sequence = 224 Nucleotides)

AAGAGCTGAT TGAGGCTGCC AAGAGGAACG ACTTCTGTAA GCTCCAGGAG CTGCACCGAG CTGGGGGGGA CCTCATGCAC CGAGAGGAGC AGAGTCGCAC GCTCCTGCAC CACGCAGTCA GCACTGGCAG CAAGGATGTG GTCCGCTACC TGCTGGACCA CGCCCCCCCA GAGATCCTTG ATGCGGTGGA GGAAAACGGG GAGACCTGTT TNCACCAAGC AGGG

SEQ ID NO:1889: (Length of Sequence = 261 Nucleotides)

SEQ ID NO:1890: (Length of Sequence = 312 Nucleotides)

CTGCGAGACT ACGAGACGGT GGTCAAGGTG AAGCCCCATG ACAAGGATGC CAAAATGAAA TACCAGGAGT GCAACAAGAT
CGTGAAGCAG AAGGCCTTTG AGCGGGCCAT CGCGGGCGAC GAGCACAAGC GCTCCGTGGT GGACTCGCTG GACATCGAGA
GCATGACCAT TGAGGATGAG TACAGCGGAC CCAAGCTTGA AGACGGCAAA GTGACAATCA GTTTCATGAA GGAGCTCATG
CAGTGGTACA AGGNCCAGAA GAAACTGCAC CGGAAATGTG CCTACCAGAC AGAGAAGATT ACAGTATGTG GG

SEQ ID NO:1891: (Length of Sequence = 298 Nucleotides)

CCTAAAGGCC AGGCAAGGCT GATTCTCCAC TTCCACATGA GACAGAGCTG ATTCTGCAGG GAAACGGCTG GGGAGGCTCC ACCTCTTTCC TCCCCACAAC CATTTACTGG GAAGTTGTGT ATACTTGGCA GTNTGGGAGG AAGGTACTTG GAAGACCCTG CCAGCCATCT CCCACCCAGA CTTCTTCTCA CCAGCACAGT CTTCAAGGCT TGGTGGGAAA GGTGTGTGGG AGTGGAGAAA GACAAAGGGC CCTTCTTNAA GAGAGGAGCT GCAGAGAGGG GCAAAGGGGT TCCTAGCC

SEQ ID NO:1892: (Length of Sequence = 333 Nucleotides)

CTCCAAGGTC ATCCAGTCCG TOGCTAATTA TGCAAAGGGT GACCTGGACA TATCTTACAT CACATCCAGA ATTGCAGTGA
TGTCATTCCC AGCAGAAGGT GTGGAGTCAG CGCTCAAAAA CAACATCGAA GATTGCGGTT GTTCCTGGAC TCCAAGCACC
CAGGGCACTA TGCCGTCTAC AACCTGTCCC CGAGGACCTA CCGGCCCTCC AGGTTCCACA ACCGGGTCTC CGAGTGTGGC
TGGGCAGCAC GGCGGCCCC ACACCTGCAC ACCCTGTACA ACATCTGCAG GAACATGCAC GNCTGGCTGC GGCAGGACCA
CAAGAACGTC TTC

SEQ ID NO:1893: (Length of Sequence = 487 Nucleotides)

CCAGATAGAG TITCTGTTT TNAGTITIAC ACGTGCCACA TCAGGGAAAG TIAGGTTATG ATTAAAGCAA GAGATGATAG
ATGAACAAAC AAAGAAACAA CAACAAAAAG CCCATGCAAG AGGCAGGAAA AGAGGCTGAC TGGTTAAAGA ACAGGCCAGA
TTGGACAATA CTGATCAAGA GGGGTTCACA TTTGAAAGAA CAGTGCTTTA TTCCTCTACT GACTAGAACT AAAGGGATTT
TGGCCGGGTA CGGTGGCTCA CACCTGTAAT CCCCAACACTC TGGGAAGCCA AGGTGGGCGG GTCACGAGGT CAGGAGTTCG
AGACCAGCCT NACCAACATG GGTGAAACCC CATCTCTACC CAAAATACAA AAACTTTINC CGAGCGTGG CCCGGCGTTG
GTTGGCTCAT ACATTTNATN CCCCCNCTTT NGGGGGCCCA NCCGGGGGGT TCACCTTAGG GTCAAAGGGT NCGGGGNCCT
TCTTGGC

#### SEQ ID NO:1894: (Length of Sequence = 283 Nucleotides)

GETGETGAG TEGECTCTG AGAAGCTGGA GCTGACCAAG TACGCAGACA AGCCGGCTGG CACCTACAGC GGCGGCAACA
AGCGGAAGCT CTCCACGGCC ATCGCCCTCA TTGGGTACCC AGCCTTCATC TTCCTGGACG AGCCCACCAC AGGCATGGAC
CCCAAGGCCC GGCGCTTCCT CTGGAACCTC ATCCTCGACC TCATCAAGAC AGGGCGTTCA GTGGTGCTGA CATCACACAG
CATGGAGGAG TGCGAGGCGC TGTGCACGCG GCTGGCCATC ATG

#### SEO ID NO:1895: (Length of Sequence = 234 Nucleotides)

ATGTCCATTA GCCTCATTTG TCATCTGAGG GAGCTGGTGA GAACAGCCTT GGCGTGAAGG CATCCCTGGT AGAAGTCGGG
GGAGATAGAT AGTCACAGTT CCCCAGTTGG TGGAAATNGG ATNGGAGTAG GGAGAGGCTN GAACAGACCC TTCCCCATTC
ACCTGGRGAA TTTTCTCCTC CCACTGCCCT AAACACTTTA TTTCCATCAC AGGGGAGAAA TNCTGCTGAG AAGG

### SEO ID NO:1896: (Length of Sequence = 285 Nucleotides)

CTITAAAGIG TAATAATATG ATTITITAAA AGAAATTAT TACTIGITGC AAAGGICTIT TIAAACCAGI TIAGATTICA
AGAAAAAATA AATGGAAATC ATCGAAAATT CATTICACAT TAATGGICTA AAAATAAACC AAAGGACATT ATGIGIGCAT
GIGIGIATAA GIGCACACAG AAATATATAT NCATATGING ACTATATACA TGIGIGIATA TATGIGIATA TATACATNCA
CTIGIATAAA TGIATATACA CATATACCTA TAATGIGIGI ATGIG

#### SEO ID NO:1897: (Length of Sequence = 288 Nucleotides)

GCAGGITTAT GITTITATIT AIGIATINA ACIGACITAT TIGIGIATCC CACTAGAACA ATACATICAC AATATACITG CAGAACTGIG CCIGGGGGAT CATGGGAGCA GAGAACTIGI CCAGIGAATA GITGITGAAG AAAGGAGTAA AAWCTCCCCC AAACCCTAAA GGCATCCITI TCGIAGIGIG IGICCCAYAG GIATGGCIGC TGAGCACCAG GGCTGCTCA CCATGNICCC AAGAACCAGA GTCANGGAGG CAGACAGCAG GGKTIATTAA GGIGCACA

## SEO ID NO:1898: (Length of Sequence = 398 Nucleotides)

CAGAAGTAAA AGATTITTAT TGITCTATAG ACACTICTGA AAAGAGATCI AATTGAGAAA ATATACAAAG CATTTAAGAG
TTTCATCCCC AGAGACTGAC TGAAGGCGTT ACAGCCCTCC TCTCCAAGGC TCAGGGCTGA GAACGGTTAG CATATCGAAT
GATCAGTAAA AACATGCAAA AGTGAGAAGG AAAGAGAAAA AGGTGCATTC CCCTAAGCTG AGGGGGATGG AATTTCAGAA
CAGAGGAGGC AGGGTGGACA AGTACCAGGT GGCTCTCCCT TTCCCTCTGT GTTATCTTTC AAAACAGTTC CAAGCTTTGA
GAAAGCAATG AGCTCCACCT ACTCAGCAGA CCCACGGGTC GTCCCCCTGG ACGTGACTTA GCAGTGACCT TGCCTGCC

## SEQ ID NO:1899: (Length of Sequence = 227 Nucleotides)

CATGGGGACC CGGGTTTATT TTATTAGGAA GGAAACAACC AAGCACCCCA TGTTCCTGCC CGGMACTCCC GGGGGGAACA
TGCCAAAMAG CCGGGGATCG AACCCAGCCC ACCTGTCGTG GRGGKCCCTT CCTTCTCAGG CCACAGAAAT AAACCCGTGT

#### ACTITYTIATT GITAGCACAA CATTACCAGA AAACGKTAAC GGCAGCCAAG CAGGACAGAC AGITAAG

SEQ ID NO:1900: (Length of Sequence = 405 Nucleotides)

GGGATGCACT GGGTTTCACA TCAAGTTCTT GAGAGGWTCC CGAACGACTT CTCTGCCCCA GGGGAGTCCG AGCCACAGTT

TTCTGATCAA CTGATGATTC TRACCCGCTT CTTTCTCTCT GGGGGGTAAG ACACTTGTTG TTGAGCTCTG GGGATGATGG

AGAACGACTC CTCGGCCTAG GAGTCTGAGG CAAAGCTTTC GGTTCTGGGG AAGAATCACA TTCGCTTCTC CCTCTAGATG

GCGTTCTAAGG TATATCTTTC ATTCCAGGAG AGGACCCAGA CAGGCTGTGC CTCGAGGGAG TCCCAGACCC ATCTCTAAGT

CCTGGAGAAG ACCCAGACCT GCTTCTCCTT GATGGAGTTC TGGTAAACCA TCTTTCATTT CAGGAGAAGA TGCAGACTAC

TTCTT

SEO ID NO:1901: (Length of Sequence = 244 Nucleotides)

ATRATICATA TECTAGITTA TITATCITAT TATTEGAGAGA TAATTICATE ATGACAGITA TCAATAATCA ATTACAATAT
CAAGAAATTC AAAGAACAAA ATCITECAGA GACIATECIT TIGIATTIGG ATTIAAAAAG TATGIGATCT CATTITCACA
TACCAAGCIG AGAGGCCATT TAGACTATCT CITTECTAAT TITTECTTAC TECTGTAGGG AAGAAGATTT CCAATGAMCT
TTAG

SEO ID NO:1902: (Length of Sequence = 329 Nucleotides)

TAAAAATAAA AAAATAAATA AAATTTIAAA AATAATAAA ATTCACTATA TACACATATA AAGAAATAAA AAGAAGTCTC
AGTTGCAGCT ATTTGTCAAA ATTAATATCC ATTTCTWITW ATATACCGTG AATATTGCGC AATTATAGAT CTGGATTTTA
AACCACTTAA TGAAGCCGCCA ACACCAGGTG TTTTAAGGTG TTGGCATTCT TCGCTGATTT GGCTGTTCCC AATGTTTACA
TTATTTAATC TTGCAAAAAT GGTTCTGATG CACTTGGGAT GTGAAATGCT GTCCCGTTTT ATTTTTTAA TGTTGTTATC
CTTGGGTGT

SEQ ID NO:1903: (Length of Sequence = 421 Nucleotides)

ATTITATATT CCACAGICAG GIGGGICIGC GATASTCATT TAATGITAAA CGCCATCAGG GGCCICTCCT CCCGITTCIG CCAGGGGCTT TICTIGICTT CICCITGGIC ATCATCATCA TCGICTICCT CITCCTCGIG GGCAGATCTT CICIGGIGGG GGCTGGCTGC TGGCTCCGAG GGGCATCCG CAGTCCGICT GGTCGTCTCC TCCTGCAGGC TGGGCAGCTG GCCACCACTT CTCTGCACGC ACCCCTCCAA CAAGCATCGC AGGCACTGT CCTCGGGGGT ACAGACCGIG GTCCCACATT CGCTACCACT CTGTTCCACG NCATCCAGGG TACACGAGCT GCGTGTAGGC CGTGCTGTCT TGGGGCTCGA GGCTCTTTCT GCTGGTGCTC TTGGACGGGC GGGTAAATTC T

SEO ID NO:1904: (Length of Sequence = 423 Nucleotides)

GICIGIOGGE CCTGTCTGAA GTGACGGTGE AGCCAGGCTG CTCCCTGCCC AGCAACCCCG AAGCCATTGT GCTGGACGTC
GACTACAAGT NTGGGACCCC GATGCAGAGT GCTGCAAAAG CCCCATATCT GGCCAAGTTC AAGGTGAAGC GATGTGGAGT
TAGTGAACTT GAAAAAGAAG GTCTGCGGTG CCGCTCAGAC TCTGAGGATG AGTGCAGCAC GCAGGAGGCC GACGGCAGAA
GATCTCCTGG CAGGCAGCCA TCTTCAAACT GGGAGACGAC TTCCCGCAGG ACATGCTGGC CCTGCAGATC ATCGACCTCT
TTCAAGAACA TCTTCCAGCT TGTCGGCCTG GACCTCTTTG TTTTTCCCTA CCGCGTGGTG GCCACTGCCC CTGGGTTCGG
GGTGATCCAGG TGCATCCCCG ACT

SEO ID NO:1905: (Length of Sequence = 370 Nucleotides)

CAGAACCAGA ACATITITAC TCTITGGGCT CIGGGAAGGG CCAGGCAGAG TGCAAGGTGT CCACAGGAGG GGTAAGCAGA GAGGAGCTAC AGGGGGGCTGC AGTCCTAGTA CCCTGTTGGG GAGGACTGAG GGATGGTGAG TTTGGTCTCC GGAGGGGGGCT

CCAGTCCTGG TGCCCAGTTC TNACANCTGC CCCTCCTGAG TTCACACTGG AGTCCTTGCA GTCCTGAAAC CACAAGGCCT NCCTGAACCC TGGGTCAGGA GAGAAANACT TGGGGAGGGG AAAGGACGGC GTGGGCTACC CATKACGGCT CTGAGTTCTT CCTGGGGCTT GTGTCTTTTC CTTGGCAGAA GAGGGCACAG CCAAAGGCAA

## SEQ ID NO:1906: (Length of Sequence = 415 Nucleotides)

GTCACACCTT CATTCAGTGA GGAAGAAATG CTITCACTCT GGGAATTCAC AGCATCCCAA TCTGACGTTG TACCCGTGTG ACACTGTTG TGAGCCCCAA GTTCAACGA GCTCTTGCAA GTAAACGGAC ATTCGTCACA TTTGTAGACA GCTGTCTTTC CAGATAAGTG GATGTTTTCT ATGTGACGAG AGATGCTACG TCGATGCATG GTGAGGAAAG GACAAAAGGG GCACTGGAAC CTATTCATGA ATCTNCTAAA TGGAATCCCC TTGGTCTCCA ATAATTTGTT GCCATCTGAG CCCATCAGCT GCTCTGCAGA CAGGCCTGAT GTCTGGTGAT CCACAGCACT TAAACCATTC TCACTTGTCT ATTTCATTTA ACTCTTCATC AGAACTAGAG TCATTAGCAT GCTGT

#### SEO ID NO:1907: (Length of Sequence = 214 Nucleotides)

TGAAATCCTG TACGIGTCAA CITTGAAATG TATGIGTGIT GGITGGGTGG TGGIGATGTG ATACGGITTG GATGICTGTC CCCTCCAAAT CICATGITGA ACTATAATCC CCAATGITCC AGTIGACGTG GTGTTTGGTT CCATGGCGGG GTACCCTAGG GATTCATCTG TTTTCTTCAC TTCCCTTTGC ATCIGAGATC CTGCTGGAAA CCAC

#### SEO ID NO:1908: (Length of Sequence = 410 Nucleotides)

CAGGAGAGCT GGGCACATGT CCCAAGCCTG TNAGTGGCCC TCCCTGGTGC ACTGTCCCCG AAACCCCTGC TTGGGAAGGG
AAGCTGTCGG GTGGGCTAGG ACTGACCCTT GTGGTGTTTT TTTGGGTGGT GGCTGGAAAC AGCCCTCTCC CACGTGGCAG
AGGCTCAGCC TGGCTCCCTT CCCTGGAGCG GCAGGGCGTG ACGCCCACAG GGTCTGCCCG CTGCACGTTC TGCCAAGGTG
GTGGTGGCGG GCGGTAGGG GTGTGGGGGC CGTCTTCCTC CTGTNTCTTT CCTTTCACCC TAGCCTGACT GGAAGCAGAA
AATGACCAAAA TCAGTATTTT TTTTAATGAA ATATTATTGC TGGAGGCGTN CCAGGCAAAG CCTGGCTGTA GTAGCGAGTG
ATCTGCGGGG

## SEQ ID NO:1909: (Length of Sequence = 339 Nucleotides)

AAAATTAAAT CCAAATTITA TITAAGGATIT CAGGITACAT ACTICAAATT TCTAGAATGG AATGGAATCA TITITGGAACT GGAAAAAATGG CATAAACACT GACGICCCTT AAAACTICAA TITITATAAAG AAAATTCTIC TGCAAACCAC ATCCCCTITA TGTAACAAGA CTAGGIATTA TCTACACCTT CACTITGGCA ATAGCTATIT CCTAAAGAAT GAAAAAGATG ATTITINCTAC TICAGGITCAT TAAAAATGGG ATTCTATCTT TGAAGTICAG AAAAAGCTGC ATTICGATGA ACTATGGGIT AAAAAAAAAAAAGGCACAATAGTG TCTAATCAA

#### SEQ ID NO:1910: (Length of Sequence = 439 Nucleotides)

GGCCCAGGGA GCACCAATCA CAGCAGGGGC TCTGGCCCAG GTGTCGGCAG CCCAGGCCTC CATTTGCTAA TGATTAATAC ACTGTTTGGG CTGGCCAGTT TTTCATGCAT GCAGCTTTGAC GATTGAGCAC AGTCAGGCCT TTGTATTAAA AATGAAAAAT GAAAAAACAA ATTCAAAACC TATTCAAATG GGTTCTAGTT CAATTTGTTT AGTATAAATT GTCATAGCTG GTTTACTGAA AACAAACACA TTTAAAATTG GTTTACCTCA GGATGACGTG CAGAAAAATG GGTGAAGGAT AAACCGTTGA GACGTGGCCC CACTGGTAGG ATGGTCCTCT TGTACTTCGT GTGCTCCGAC CCATGGTGAC GATGACACAC CCTGGTGGGC ATGCCCGTGT ATGTTTGGTTT AGCGTTGTCT GCATTGTCTA GGAGTGAAC

SEQ ID NO:1911: (Length of Sequence = 342 Nucleotides)

AATGCACCCA TITIGGTIGCC AAGAGCTICT CACIGCCTIG CTAGCAGCCT GCCACTGINC CCTGGCAAAT TGAAACCACC CACGCAAACA CTCAAAACCC CAATCTCCTT GCTAATAAGA TACAACCAGT TAACACCGTG AAAAATGCAC ATCTCCAGCC TTCATTTCAA AAAAGAGCTC TGTACTAAAT GCAATATGCT TTTAAAGGGG GTTTTACAGG GACCAATCTC AATGCAAAGA CCAGTACCAG ATGTCTGAGT TTTGGTTACA GGTTTATAAT TAGACACAAA ATTCACTCCA CACTGGAGTT TTACTTTCAA GCTGGAGTTA GCATTAGTTC TA

## SEO ID NO:1912: (Length of Sequence = 380 Nucleotides)

TCATGCTTTT AATACAAACT TAAAAAAAACT TOGAACAATA GAAACTGTAC AGATTTGATC AATCTTTTTG TTTTGTTTTT
AAACTAAAAT CTCTAAACAC ACCAATGTCC CATTCCAAAA TATTGCACAA CATTCTGAAT ACAAAACCCT TGATTGTATT
CCTCCTNCAC TAAAGAAAAA AGTTCATGAC CCTGCTCCCC GGGCTCCTCT CCAGGCTTGC CTCAATGCCC CCTTCCCATC
CCTAGGGAGA AAACTAGAGA ATCTATAACT CACTGCATTG AGAAAAACAC ATCATTCTGG ACTAACAGTT TTCCATTCTT
CAGANGGNTA ATCCACCTTT TGGATTTGTT CCTGGGGAAA GAGGGGTAGA TAGAGGGATG

#### SEO ID NO:1913: (Length of Sequence = 361 Nucleotides)

GAGACAGAST TITIGCTCGIT GCCCAGGCTG GAGTGCAATG GCGTGATCTC AGCTCACCAC AACCTCCACC TCCGGGGTTC
AAGCCATTCT CCTGCCTCCG ACTCCCGAGT AGCTGAGATT ACAGGCATGT GCCACCACGC CCAGCTAAGG CTTTGTATTT
TMAGCAGAGA TGGGGTTTCA CCATGTTGGC CCGGCTGGTC TCAAACTCCT GACATCACAT GATCCCCCCG NCTCAGCCTC
CCCAAGTGCT GGGATTACCG GTGTGAGCCA CTGCCCTGGG CTCTCCAGTA CATTTTTAGG GGGACGATCA ATGAGGATTC
TCTTCTCTGA GTTACTGCAT GTGTTACAGT TTATAATCCT T

## SEO ID NO:1914: (Length of Sequence = 409 Nucleotides)

GGGGGCCTTA CAACTAGGTA TGGTGGATAT TGCCCGACAG ACGGTTGAAT TTCTCTACGA AGAGAATGGT GGCATCCCAA
GAGACCTTTA TCTTCCCACC ATTGAAGACA TTAAAGACGA AGCAAACAAG TTCACAATTG ATAAAGTTCG AAAAGGTCTC
ACAGTAGTAA CCCGCTCTCC AGACAGCAAT AATGTAGCCA GCAGTGCTGT TGGAACTGCT CTGCCAAAAT TTGCCATCCG
AGGGATGCTG AAAACCTTTG GGCTTCATGG AGTCGTCTTA GATGTTGATT CAGTGAATGA ACTGGTGCAG GTAGAAACGT
ACCTCCGCAG TGAAGGTGTG CTGGTGCGAT ACTTGGTATC CTATTTGACA TGTTGGGAAA GGGCCCCCAG CAGGCTACCG
AARGGACTT

## SEO ID NO:1915: (Length of Sequence = 402 Nucleotides)

### SEQ ID NO:1916: (Length of Sequence = 382 Nucleotides)

GAAATGAGAC TITATICTGA AATTATTAAA AAGAACAGAG ATGCTCCATT TGGCTGCATG CAGGGGGGGC GGTTGGGGGG ACAGAGGGGA GGACAGGGC TCAGCCAGGG GGACCGTGTC TCTTTCCCAC GCAGGACACT GTGCATGGGG CTCTGGGTGC ATCTGCCCAT CTGTCTATGG GCCTGTGTGT GTGTNAGAGG CCAAACACAG AGAGCTCCGT GGGTCTGTGT GTATCCAAGT GCTAAAAGGC AGGCTGGCTT TCTGGGGCCCC ACAGCTGGCG GGCTAGTATC CTGGAAGGTT TCACTTGGTG GCTTGGCCTA and the second

416

#### GGGACCAGCA AGGGCTTGGN GTTGGAAGGG GTGGCTCAAG GAAGCCTCTT TCTCCACTCA CA

#### SEO ID NO:1917: (Length of Sequence = 375 Nucleotides)

GAGATTAAAA TAAACAACAC AAAATGTATT TAAATGAGAA ATTGAAATAT TAAAAATAAT ATTAGGTGAC ATTAAAACTG
TCATAGAAAT AAACTGTATA TACAACAAAT AAATCAATGA TTGTTAACTT TTTTAGACAG TTTGAATATC AGATTATAAT
GAATAGCATT ATTAGCCAGT AAAAAGAGCA TATAAATTAT TTTAAAATTC CAAATAAAAA TATTTAAAATT
TGGACCCAAA ATTATGTCAG TAATTTCATG AAAGTAGATC TCCAATAGGT CCTATATTCT AGACACTATG AAATGACATC
AGAAACCGTC AATTAAAGTG TACCCCACAA GTGATAACTA GCTACCATAC AAGTT

## SEO ID NO:1918: (Length of Sequence = 315 Nucleotides)

AATATACAGT ATGATACACT GATGIGCAGA ATGIGATTAG TITATTAATC ATATGIGAAA ATATTAGIAG CTACATATGG
CCAGAATAGA TITTYCTCTC TACAAATGIA AGITAGIGIT GATAGAATTT GITATGCGAT ATTTGGTTCT TIGGITTCAG
TCTCAATGCT TTCTTCTTGG CATTTCATTG ACTCGGTAAA TTAACCTCAG CATCAATTTT CTTTTAAATT CAACAGTTAT
TCAAATTGAT CGGAAATTAA ACTTGTATGT AGCTAGITAT CACTTTGGGG GTACACTTTA ATTGACGGG TTCTG

#### SEO ID NO:1919: (Length of Sequence = 285 Nucleotides)

CAGAAGTAAA AGATTITTAT TGTTCTATAG ACACTTCTGA AAAGAGATCT AATTGAGAAA ATATACAAAG CATTTAAGAG
TTTCATCCCC AGAGACTGAC TGAAGGCGTT ACAGCCCTCC TCTCCAAGGC TCAGGGCTGA GAACGGTTAG CATATCGAAT
GATCAGTAAA AACATGCAAA AGTGCAGAGG AAAGGGAAAA AGGTGCATTC CCCTAAGCTG AGGGGGNTGG AATTTCAGAA
CAGAGGWGGC AGGGTGGACA AGTACCAGGT GGCTCTCCCT TTCCC

## SEO ID NO:1920: (Length of Sequence = 181 Nucleotides)

GCAGGITTAT TITITITATIT AIGIATIINA ACIGACITAT TIKIGIATCC CACIAGAACA ATACAITCAC AATATACITG CAGAACIKIG CCIGGSGCAT CAGGGGGCA GAGAACITIT CCAGIGAATA GITTITGAAG AAAGGAGTAA AATCTCCCCC AAACCCTAAA GGCATCCTIT T

### SEQ ID NO:1921: (Length of Sequence = 351 Nucleotides)

AGACGGGGTC TCACTCTKTC GCCCAGGCTG GAGTGCAGTG GCGCAATCTC AGCTCACCGC AACCTCCGCC TCCCAGGTTA
AAACGACTCT MATGCCTCAG GCTCCCGAGC AGCTGGGACC ACAGGCACAT GCCATCATGC CCGGCCAACC TTCTGTACTT
TTWAGTAGAG ACGGGGTTTT ACTGTGCCAC ACAGGCTGGT CCCGAACTCC CGACCTCAGG CGATCAGCTR CCTCAGCCTC
TCAAAGTGCT GGGATCACAG ACGTAAACCA CCATGCGGGG CCCCAGTCTT TTCTTCAGAG GGCTCCTNAG CACCCCCAAC
CCCAAACCTG AGGCCTGTGA GAGTCTATCC G

#### SEO ID NO:1922: (Length of Sequence = 198 Nucleotides)

CCTCATCTEG ACACAGATGA TITTECCAAAG AAGCCGCCTG CCCAGATCTG CAAACCTTGC AACCCAGCAC TCTTGCATAT CTCGCTTAGC GTGTCCACAA CTGGGATGCT AGCTGGCGTA AAGATGCTCA CGCAGCCACC AGTGCCTCTG CCGTCCATAA GTGCAGTGTG ACTTACCCTC TGAGAGTGGC ATCTGCTG

## SEQ ID NO:1923: (Length of Sequence = 303 Nucleotides)

TIGATITICC TATEGIGIA AATCCITTGT TATTITTCTA AAAAAATAAA ATTTAAAAG AAAGAAAACT AAGGAAGAAC
AAGANGCTAT TIACCCAAAG TGAGCTINCA GITTTAGIIT TGCAT GCTG TITGACTGCC TITCCGCCCT ATGAAAATCA
AGAAAATCIT TITTAAAAAT GGAGTCCTGC TATTITCCAC TCCTTGCAGA TAATACAAAT TCAGTTTGTC AGGTTGGATG

# GREAGITIGG AGCIGIGATG GATCIGITIGG CGGGTTTTGG ATGIGTAAAG AATGATATAT ATA

SEO ID NO:1924: (Length of Sequence = 231 Nucleotides)

GICCICCEG ATTCICAACC TITGCAACCI GCCITCOGIC ACTGCIAGGI CCACGIAGGC TIAACCITGA TCITATATGI AGGACOGGIC TICACCITAA GCAAGAGAAA TGIAAGAAGI GNTITCCCAA CTCAGITGCI GGCCCAGCII TGGCCICGIG TICCCITICI GAGGACIGAC CTITGGIAIT GCTCIGGAGI CICATATCCC CTITGGCCCT AACIGACCAC G

SEO ID NO:1925: (Length of Sequence = 249 Nucleotides)

GITTITACIT AACCATICIA TIGITGGGAA TIGGGITTCC ACTITITINI TATAGATAGI GGIGCAGIGA ACATITITAA ATAGCITITI NCTICAGIGI AATTATITCC NIAGAGAAG TIACCAAGAG TGGITTTACT AGITCAGAGG GCITCAGGAT TINATGGCT CIINCIAGCG GIGCICIATI ATCCINNAGA AGACTIGIAT TACITCCAGI GICAAGAAGG TIGCNCTICC ATGGAATGG

SEQ ID NO:1926: (Length of Sequence = 367 Nucleotides)

TTTTTCTCAG CAAGGAACAG TCATGAGAAA GAGAATGCGT TCCTAGGGGG AGGICTCTAA AATGGCCACT CTGGGACTGT CTGTCTTATA TGGTTGTGGA TAAGGGATGA AATAAACCCC GGTCTCCCTT AGGGCTCCCA GGCCTATTAG GACGAGGAAA TCCCCGCCTA GTAAATTTTA GTCAGACTGG TTGTCTGTTC TCAAACCCTG TCTCCTGATA AGATGTTATC GATGACAATG CATGCCTGAA ACCTCATTAG CAATTTTAAT TTCGCCCCGT GCTCTGCCAT TTGCCTTGTG ATATTTTATT GCCTTGTGAA GTATGTGACA CAACCTATTC GTACANTTCC TCCCCTT

SEO ID NO:1927: (Length of Sequence = 231 Nucleotides)

CTITIATIGG GGGGGATAC CGCAAGGGCC CGCCCACGGI CAGGITAGIG TICIGCICIT GCAGAGGCGC KACAGCCIGA CACCICCACC TGCCACCGC CCGGGGTTAG TGGAACATGC AAAGCTCAGA GGGIGGAGGC AGGGGIGGIC GCIGCIGAGA CCAGGGCTGN GTGCAACAGG AGGGICAGCA CAGAGCCTGG CTGGTGTCCC TGGGCCCCAAA GGGGGCTGGG G

SEO ID NO:1928: (Length of Sequence = 283 Nucleotides)

CCCCTIGCIT CCCCTGAGCC CAGGIATGIA ATTCCTACAC ACACTGATCG AGCITGINIG TGIGIGIATA TGIGIGIGIG TGIGIGINIT AATGIGACAT GCATGIACTG ATCCNGAGAA GCCTTTATAC CAAGAATAGA GCTGGGATCI CAAGCCCACC CTCCCAAGAT CAGACAGCAG AGTGAACCAG GAGGCCACGA CAGGCCTTGI GICARATGGC AGACGNIGCA GCAGGAAGCA GAACCACGGG ACGGGRNCA TGGGATGCIA TKGGCAGCCA GCT

SEO ID NO:1929: (Length of Sequence = 287 Nucleotides)

CTAGGAAGIA GGGAGAGAAT TIACTAAGIA AGGAGAGAAA GGAAAAAGAA CAAACATGGA ATATGNICAA GCAAATAACT
TCCAACAGAA ACAAGANGAT ATGITTIAAA ATATATTTCC CCTGCCCAAT AGIAAAACIT ATTICAGGCA CAATGCATTA
CTGAGGIGAA ATTAAAGITA CATAAAATTG AAAACATCAC ACTGGANAAC ATTICATGGG GCTCAACTGA AGGIGGCATA
GTCCAGGAAG GCATTTGGAC ATGIATGGGG TGITTTCTTG TTGCCCC

SEQ ID NO:1930: (Length of Sequence = 357 Nucleotides)

ATGGAACACT ACTGCAACAG CTCCACAGAC CGGCGGGTTC TGCTCATGTT CCTGGACATC TGTTCAGAGC TGAATAAGCT CTGCCAGCAC TTTGAGGCCG TGCACTCTGG CACCCCAGTC ACCAACAACC TCCTGGAGAA ATGCAAAACC CTCGTTAGCC AAAGCAACGA CTTAAGCAGC CTCAGAGCAA AATACCCTCA TGATGTGGTG AACCACCTCA GCTGTKACGA GGCCCGGAAC

CACTACGGG GCGTGGTCAG CCTCATCCCC CTCATCCTAG ACTTAATGAA AGAATGGWTC GCCCACTTCG AGAAGTTGCC GCGCAAGGTG CTGCAGGGCA CGCGGGCTGC CTGCACT

#### SEO ID NO:1931: (Length of Sequence = 343 Nucleotides)

ATCACTTCCC CACCCCACAG GATCTGCCCC AGAGAAAGTC CTCGCTCGTC ACCAGCAAGC TTGCGGGTGG CCAAGTTGAA
TGATGCTGCC CGGGGCTCTG CCAGATCCTG AGACGCTTCC CCTCCCTGCC CCACCCGGGT CCTGTGCTGG MTCCTGCCCC
TTCCTGCTTT TGCAGCCAGG GGTCAGGAGG TGGCTCGGGT GTGGGCTGGA GAGGCAGAAG CCCTTTCCTG TTGGTGTCCC
AGCACATGGA GCCCCTTGGG CTGAGCACCA AGACCTTGAA CCTTTTTTGT TTTACCTTTT TTCCAAATAA CAGTTTGGAG
AAATATCAAT GAAATCTGGG GGT

## SEQ ID NO:1932: (Length of Sequence = 314 Nucleotides)

TITCATGGGT TITTGTTTG TITATTTCGA ATACTGAAAA AGTCCTTTGG GCTCTGTGGG GTTCCCCACG CTCACGGCTC CTTTCTCCCA CACTCACTGC CCTTCTTCCC ACAGCAAATC TATTTCAAGG ACAGTACTTT TTAAAATGAT TAATGTTGAG TTCTCCAACTA GCTCTGCAGA ACTAGAGGAG CTGTTTGCAT CTGTCTGTGC GGATGGAGTT TCTTTTATCT GACACCAGGT CTCCAACCAC ACTGATGCAA GGCATTTTAT CTACAGAGCT CAACTAGAAC CCCTTTTTCA TTAGGCTACT CCAA

# SEQ ID NO:1933: (Length of Sequence = 378 Nucleotides)

AGCITOCIGO GGGACCACAG CTATGIGACT GAAGCIGACA TCATCITCAC CGITGAGITO AACCACAGG GAGAGCIGOT GGCCACAGGT GACAAGGGG GCCGGTCGT CATCITCCAG CGGGAACCAG AGAGTAAAAA TGCGCCCCAC AGCCAGGGCG AATACGACGT GTACAGCACT TTCCAGAGCC ACGAGCCGGA GITTGACTAT CTCAAGAGCC TGGAGATAGA GGAGAAGATC AACAAGATCA AGTGGCTCCC ACAGCAGAAC GCCGCCCACT CACTCCTGTT CCACCAACGA TAAAACTATC AAATTATGGA AGATTACCGA ACGAGATAAA AGGCCCGAAG GATACAACCT GAAGGATGAA GAGGGGAA

#### SEQ ID NO:1934: (Length of Sequence = 239 Nucleotides)

ATTTAAATTG ACAGCCTTCC ATTTTTCGAG AAAGTACAAA CAGAACTGCT TTAGCACCCCA TCGAGCCCCA AACGGGTAAG GTAAGCCAAG GTTTTAATGA CCAGCCCAGT ATCTAAGCTT CCAAACGGAT GCCAGCCCAT CACATACTYA CCCTGGGAGG CTGCTGCACG GGCATTCTCC YGATGCTCAC GGCACTTGGK GTAGGTTTCA RGATCGCCTC TTTGAGGAAG GACTTCAGG

# SEQ ID NO:1935: (Length of Sequence = 319 Nucleotides)

TTAATTTTT TNTCCCATAG AGGAATAGCA TTACAGTCTA ACAATCAGAA TTCTGTTACA CACATACACA GGCATGCCAC
ATGACCCAGT TGAGGTGGTT GINTCCTTGA GICTGTTGAC ACGTCACATG GTCAAAGTCT CCTCATTTCA GCCAGTCTCA
ACACAAAACA CCCAACAGGG ATGCACTCAA CTTGTTGGTT CCATGTGGAA CTAGGTGGCA GGGCGAGAGG GAAAGTAGTA
GAAGGGGGCT ATGGTGTGTC TGCATTCAGT CCCCTCACAT AAAGCCACAT GGATCTAGGG GGGGTATCCA AGAGCTCTG

# SEO ID NO:1936: (Length of Sequence = 415 Nucleotides)

CTATTITIAC AAATTATACC TAATGAGIAA AATTAGTGTA AAGTGATAAC ATGCITCTAC CTGTATTCT AGTGACCCTT
TAGCGGCAGG TATTITATACC TGGTATTTAT GATGCAGTAT ATAAGTGGTG AACAATAACT GACAGTATTG TGCITGCTGT
ACATGTCTGG TCTITTGAAA CAGATTTTAG TAAGCATTTT CCAGAGGTAA AACTGTGTCC TTATTCTAAT TTTATTCCTA
GGGCAAAGTA GACAGGGATT ATTTCCTTGA ATCTATTTCC AAATTAATAT TTTTTTCTTT GGTATTTCTA CACTTTAAGG
CCATTTGGTG CAATTTAGAA AGTGTTGGCC TCCCTTCCGC TAGCCACATT CAAAATTAAC TTCCAAAACC TCAGGAACAG
TACAAGGAAT TTGAA

SEO ID NO:1937: (Length of Sequence = 393 Nucleotides)

TCACTCTTGT CACCCAGGCT AGAATGCAAT GGCACAATCT CGGCTCACTG CAACCTCCGC CTCCCAGGTT CAAGTGATTC
TCCTGTCTCA GCCGCCCAAG TAGCTGGGAT TACAAGCACT TACCATCACG CCCAGCTAAT TTTTGTATTT TTAGTAGAGA
TGGGGTTTCA CCATGTTGGC CAGGCTAGTC TCAAACTCCT GACCAGCGGT GATCCACTCA CCTCGGCCTC CCAAAGTGCT
GGAATTACAG GCGTGAGCAC CGCGCCCAGC CTGINITTCA TGTTAGATCA TAATATGATC TCACCAGATC CTTACTGAAA
ATGTACCTTA TTACAAGTAG CTAAATTTCC ACATAGAGGG NIAAAAAGAT TGGGGAATCA GGTTATGACT TTT

SEQ ID NO:1938: (Length of Sequence = 407 Nucleotides)

GECCTCCCTE TOGGGTGCAA TGCAGTGGCT CAGATCATAG CTCACTGCAG TCTCGAACTC CTGAGCTCAG GCAGTCTACC
TACCTCANCC TCCCAAAGTG CTGGGATTAC AGGCGTGAGC ACCGCGCCCA GCCAGAACAT CTGTTTTTAC ACCCAGAGAG
CGCCCCTCGT TAGGACAGAA CCACGGTGCC CAGAGCCAGG AAGCCGCCCT CCTGGCGCCCC AGCATCTGAG CTTCTACACG
TGATGGGCGG GCTCAGGAGA GGACAGGGAG TCGTGGTGGA AGTTCCACAG CTGGCCGCGT GGGGGGGCCC TTGCACCGCA
CTTGCCGCCT CCTGACTGCC CCGATCCCCG CAGCCCCTGT GCCGGATTGC ATTTYCCTCC TNTCTYCCAG GGTACTGGCC
CCAGCAA

SEO ID NO:1939: (Length of Sequence = 412 Nucleotides)

GACATGCCAC CACACCAGTT AATTITITGT ATTITCAGTA GAGATGGGGT CTCACGATGC TGTCCTGGGT GGTCTTGAAC
TCCTGAGCTC AGGTGATCCA CACTTCGGCC TACCAAAGTG CTGGGATTAC AGGCGTGAGC ACCGCGCCCG GCTAAAAGAA
AGGAGATTCT AATGCATGCT ACAACACCGA TGAACCTTGA GGACATGACG TTACGTGAAA TAAGCCAGGA ACAAAAGACG
AAGGCTATAT GAATCCACTC ATATGAAGTA CCTCGATTAG CCAAATCCAT ACAGAAAGTA GAACAGTGGT TGCCGCGGG
AGGGGGAAAT GGAAAGCCTA TATTTAATGA GTCCAGAAGC TTTTTTTTGG TTTTGTTTTT TAGACGGAGT CTCGCTCCTG
TTGCCCAGGC TT

SEQ ID NO:1940: (Length of Sequence = 421 Nucleotides)

ATOCATOCCC TIGOCCAGGG CCTCACATGC COGGCTCCCC CAACCGGTCC TITCCCCTTGG GCTGCCGGTG CAGCTGTGGG
CCCAGGCTTT GGCAGGCCCA GCTTCAAGAC AGTGGGACAC AGAAAACACT TIGCAGCATC GCCTCTCCCT CCGCCACACC
CAGGTCAGCA GAGATGGGCC CCCCACCGAG AGATCACAGC TCTGGTACAG GGAGGTGGGC AGGGTTGGAG AGGAATGGAG
AGACATGTCA CCTCTATAGA AACGCGTCCA AAGTACAAGC TAAGCAGGGG GAAGGAGGAG GGCCAGAGAG CAGCCGGAAA
GAAGAAAAGA GGAACACGGC AGGGGGTTCT KGGGGAGGAG GGCCTCACAM CACCCCGCAG ATGAGCGTCT TCACCACGAA
GGTGTTCTTC GAAGTKGCGG T

SEO ID NO:1941: (Length of Sequence = 377 Nucleotides)

GICAGCICIA GAGGCACCCI GCATCATGCC CACCAGGGIG ATCCCCCTGG GATNGACCAT CICGGGATAT GAGGCCTCGG
AGGCTGGGGI TGAGATTTGG TCCTGAAGAG CTTATAGCCA GATTGCCACA TTCAAGTGIA AGTCCAGGAA AGGGGCAGGC
GGCAGTGCAC AGGGATTTAT CAGTTCCAGA ACCTCACAGT GATAAGAGGC TTTAGAGAGC ATCTAATCGA GACCTTTAAT
TTTTCGGGGA GAGCAGCTGA GGCCGTGTGG AAAATTAGTG GAGAGCTGAC AAGTGTCTTG GCTCCTGGCC CAGGGGTCCG
TGGTCCANCA CGTTGTCGTT CAGTTGGAAG CAAAGGGCTT GCCCGTGATT ACCTTCC

SEO ID NO:1942: (Length of Sequence = 401 Nucleotides)

TGAGAACATT AAGAAGGACA ACAAAATTAA ACATTCTTTA ATAAAATTCC TATAGAAAGC TCAGTCATAG GGCAAATACT CATTTCTCTT TCCCATATCA CCGAGGATTG AGAGCTCCCA ATATTCTTTG GAGAATAAGC AGTAGTTTTG CTGGATGTTG CCAGGACTCA GAGAGATCAC CCATTTACAC ATTCAAACCA GTAGTTCCTA TTGCACATAT TAACATTACT TGCCCCTAGC ACCCTAAATA TATGGTACCT CAACAAATAA CITAAAGATT TCCGTGTGGC GTGAACCATT TCAATTTGAA CTAATATCCT TGAAAAAAAT CACATTATTA CAAGTTTTAA TAAATACAGT AGAGAGCTGG CATTTTTCTA AATACTGGAT TTCAGATCTG G

## SEO ID NO:1943: (Length of Sequence = 351 Nucleotides)

CAACTCAGGT TAGCAACTGC AGGAAAACTT TCTTCATTTT CACTGAATTT TAAAGAGAGA ATCCTGTCTC TATTTCTCAGGAAAACTTAG GTGAAAAGTA AAAGAGAGGC AAAATCTCTT TCCTTCATGA GATACTTTTA TTTTTATCTC TTTCTCTACT CATGTGCTTA ACTGGTGAAA TGATTCTGTA GAAATAGATC CTTCTGATTC TGCATCTCAT TTCCTTATGG CAACTACAAC AGGAGGAATC CAGCTGGAAA TGCCCACTAAC CCCACATCCA GCACCTGAGA GAGGAAGCCA GTCGGAGCGC CGTGCTGGGC TCACTCACTC TGGCCTGCGC ACTGGGGTTG T

# SEQ ID NO:1944: (Length of Sequence = 406 Nucleotides)

GCCCAGGCTG TCTCAGAATC TTGATGGGT GGTCATTGAG CTCCTCTTCC GCCAGAGCAA GATCAGTGAA GTCCTGGGAG GCAGTGGCTA CAACTCGGAC CGGCTCTGCC TGCCCTACAT TCCTCAGCTG ACAGATGAGG ATCGTTTATC CAAGAGGAGG AGCATTGAGA AGAACATCTT CCCTGAGGAT CCCGAGGATG GTCTGGTGAA GACCAACATG GAGAAGCTGA CCTTCTATGC CCTCTTAGCT TCAGAAAAAAC TTGATCGTAT TGGCGCCTAC CTCTTTGAGA GGCTCATCCG TGACGTGGGT CGNCATCGAT ATGGGTACGT GTGCATTGCT GCTCATGGCC TGCCACTGCC AGAGCATCAA CCTCTTCGTG GAGAGCC

# SEQ ID NO:1945: (Length of Sequence = 362 Nucleotides)

TCAAATTGTG AAATTNAGAA TTCTGCTATG ACAAGTGGAA AATTGAGAAA AGACGCAGAG CCACTITITG TNATCGTGTA
GGTGACAAGG AGTCTCCCAA GTATATCCTG CTAATAGGAG TAGCTCTCAA AAGTTAATCT CAATAAAGCC TCCTAAAGTC
TCTGGCAAAG AAAACTGCTG CAATCCCTTG TGCAATTCTC CAGACTAAGC TGTATGGGGG AAGCCTACCT TTTTTCAGCC
CGAAGTTCAG GAGACTGAGG ATGTAACTGG GGACATGATC ATTGNTTCAA AGGTGATTGC TTAAGTATCT TAAAAATGTA
TAGAGCTAAT CTGAGTACCG CTTAAATTCA AGAGCCGTGG CT

# SEO ID NO:1946: (Length of Sequence = 408 Nucleotides)

AACCICINAC CCCCAGGITC AAGCAGICCI CCCACCICAG CCICCCGGI AACTGITCIT TGIAACTCIC TCATCATCGA
GGCIATATAT TAATAGACAT GGIATTAAGC CCACACGAAA CATTCAGAAT TAGAATIGGA TTAAGAAGAC GCGITTIGGC
ATCACGCIGA CTACTCCICA TCTCCGICCI CGGGAGGGI GATGCCAGCG TGGGACTCIT TGGAAGGCCT ATCAATCACA
GGIGCGCIAA AATCAAAAGG TGGGICAGTA GGITAGGGAG GCNGGCGCGA AAGGAGATGC CAGCGGGIGT TAAGAAGGAT
ATGGICAGAA GAGCTCITIG TCTCCATCCA CGGGGCCTCT GCTCAGCCCG TGTIGTCTCG GTGAGTAATT CGGGAGCAGT
GCACGGCT

# SEO ID NO:1947: (Length of Sequence = 426 Nucleotides)

CCATTIGACA CIGITACIAT CIGCAACAGT TCITGCAGTA GAGGATGCAC TTCAAAGTIGC ACTGCTTTAC TGICTCACTG
GAATICTAAA AATCTAAGCT TTATCITTIT AACATTAAGC TGIGTGGGAA TGIAGCAACC TCCTGGGTGG TGGGGTGGGG
GGCATCITCA ATTATITAGG TCTCACTGGA AAGITTGAGA TCAGAGTITTG GTAGGTGGTG TAAGGGGGACA ATGAGTAACG
GAGAGAAAAT ACAGGACTGA CITGGGGCAA AAAACGCCTG ATAATAATIT GTGAAGCACA TTITCAAACT CATTTATTCC
TTACAAGGAT CCTAAGAGGC GGGTATTATG TCCNGGTTAT ACCTGGAGGC TTAAATTGAA GGAACATCIN CAAGGGCACA
CAGTTTAATG AATGGCTGAG GTAGGA

SEQ ID NO:1948: (Length of Sequence = 349 Nucleotides)

SEQ ID NO:1949: (Length of Sequence = 378 Nucleotides)

TTCATTCCTG ATTTTATCCC AGCTGTCGGG GATATTGATG CATTCTTAAA GGTCCCACGT CCTGATGGAA AGCCTGACAA
CCTTGGCCTA TTGGTATTGG ATGAACCTTC TACAAAGCAG TCAGACCCTA CGGTGCTCTC ACTCTGGTTA ACAGAGGAATT
CTAAGCAGCA CAACATCACA CAACATATGA AAGTAAAAAG CCTAGAAGAT GCAGAAAAGA ATCCCAAAGC CATTGACACG
TGGATTGAGA GCATCTCTGA ATTACACCGT TCTAAGCCCC CTGCGACTGT GCACTACACC AGGGCCATGC CCGACATTGA
CACGCTGATG CAGGAATGGT NCCCGGAGTT TGAAGAGCTT TTGGGCAAGG TAAGCCTG

SEO ID NO:1950: (Length of Sequence = 357 Nucleotides)

TCACTAACTT TACGAATGAA AGAAAACAAT TCCATCCCTC TCACAAAAAG GACATCTTT AAGCTTTCCT CCCAATCTAA
CCTCCATGGG ATCTCAGAAA TTCCAATTCT TATAACTCAA ATCCCCACAG TGGTGTAGAT GCATTAACTC CCCGGGGACA
GCAATCTGAG GCAGGCAGGT TCATTAAACA AACATGTTCT GTGCCCTCTG GCAGAGAGGG CAGCAGGACA TGCACTGCCC
CTGAGCCAAG CTGTGGCATG GGCAAGGACA TCAAGTAGCT GACAACGGTC TGTCCATCTC AGCTGGGGCCAG
TTCAGCCTTG AAACAGCAGT TNGGGAGTGT CTCAGCT

SEO ID NO:1951: (Length of Sequence = 336 Nucleotides)

CTATCTCCCC AAATCTACGT TTCACCATTT GIACTGTTAT TTTTTTAGCC CAAGCCACCT TTATGTCACT CCTGGAACAT
AATAACTGCT TTCTCACTCA TCTCCTACAT TTTNACCTCT TATAATACAG TCCACCTTGT ACCGAGCAAC AAGAGTTATC
TTTCTGAAAT GCATATTAGA TCATGTCACA TCTCTACTTG AAGCTCTCTA AAGATTTCTC ACTAAAAGCG AAGTCTAAAA
TTTCCACCCA GACCTATAAG GNCCTTAAAT GATCTTACCT CTCTACCTAC CTCTNCGATC TTACCTATCT TCAACCTCGG
TTCTATTTTC TATATC

SEQ ID NO:1952: (Length of Sequence = 413 Nucleotides)

CAGTATGIAA TITAATCAGC AAATGCCCCA TITCCATCIC TACCGGAAGG CITTCAGACG CATTCCCAGA TCAGACAGAG
GACTAGGGIT AAGGCIGGGA ATGAAACACC AGCIAGIATC CCAGTGAGCI TICCCAAACA CACATACACA GCAAGTCAGA
CTAAACAACG TCCAACTGAA GACTCACCTC AAATACTITG ACCIAAGATT CACGTCCAGG CICTITCAGA TACACCAGGI
AAGIAAGCAC TIGGCATTCC TATCTCAGCC ATTCACTTCA CAGAATCITT TGGGIGCCTA CIGIGIGCCC AATACTGIGC
TTAGTGGIAC TIGCCCTCAG CACGAAAAAA AATTAAAAGT GITAAATGIT ATGAAGGAAC AGATTGCATA AGGAATCACA
AGGCATTCAG GIC

SEO ID NO:1953: (Length of Sequence = 382 Nucleotides)

GITTCACTCT TGTTGCCCAG GCTAGAATGC AGTGGCGATC TTGGCTCACT GTAACCTCTG CCTCCCGGGT TCAAGTGATT CTCCTGCCTC AGCCTCCCTA GTAGCTGGGA CTATAGGTGC ATGCTGCCAC ACCCAGGTAA TTTTTTTTGTA TTTTTTAGTAG AGACAGGGTT TCGACATATT GGCCAGGCTG GTCTTGAACT CCTGATCTCA AGTGATCTGC CCACCTAGGT CTCCCAAAGT GCTGGGATTG CTGGCCTGAG CCACCGCACC CTGCCTAGAA CATGCTTTIN AATAGTGTCT CTAACCATCA TGTTTAGGGC

#### CTTAGTGCTT ACCTCTTAAA GAAGGGCTGC TGTTGAGGAT TCCNTGAGAT AGTGTTTGAA AA

SEO ID NO:1954: (Length of Sequence = 389 Nucleotides)

GGAAAAGCGG GACCCAAACA GTGGTGCTGG GGAAATTTGT TCCTGTTCCC TTTGGAAGGC TGAGTGGGTG ATGCAGCACA
GGAACAAGGC TTGGACGTCA GAGGTCTCAT CTTCACTGTG ACAAAGCATA AAGGACTTGG GGTTGAGCGT GTGINTGGGC
TCAAGTGACC ATGCAAGINC TGTCACCTCC TTCCTAAGAC CCCATCCTTC TCCCAAAGTCC TCCACAAGAG CTACCTTCTT
CAAAACAATA ACAGAAACAC ATCAAGNTIN GCGTCACTGA AATTGAAGTT CTGAATTCTG CCGTCACCCC AGCAACAGTG
CCAGTTATGA TGAGACACTT GACCCAGCAC TTGGGTTGAT GTCTTTGGCT GTTACCGTGG CACCTAGGT

SEQ ID NO:1955: (Length of Sequence = 277 Nucleotides)

GCCTCTAACT CCACGGCTCA AGTAATCCTC CTGCCTCAGC CTCCTAAGTA GCTAGGACTA CAGGTGCACA CCACCACACC
CAGCTAATTT TTTTNCTTTT TGATTTTTGG TAGAGATAAG GTCCTACTAT GTTGCCCAGG CTGGTCTGAA ACTCCTGGCC
TCAAGTGATC TGTCTTAGCC TTCTGAGTAG CTAGAACTAG TTTTAATGAC CNAAAGAATT ATGTGTTCAC CNGTGATTTT
ATGTGTTTTG TTAAGACATT CAGAATTTAG AGAAATG

SEQ ID NO:1956: (Length of Sequence = 380 Nucleotides)

GIGTAATGTT CTGAGGGTGG CGAATGCAGG GGCGCGTTCC TCCCGCTGTC GATCTGGAAC ATCTTCTCGC CAACAAAGAG
CAGGGTGAAG ATGAGGGCAA GCTGGTAGAC AGCATGGCCC AGGATGTTCT TCATCATGGT CCTGGAGGATG AGCGGCTTGT
TGCGGCCGTA CGGTTTCCTC AGCAGCAGGG TCTCCGTGGG CGGCTCAGTG GCCAGTGCCA GCNAGGCAAA CGTGTCCATG
ATGAGGTTCA CCCAGAGCAT CTGCACGGCC TTCAGAGGGG AGTCCTGCGT GATGCAGGGG CCTNTAAAGC CACAATCACG
GCCACCACGT TGACGGTGAA GCTGGAACTT CAAGAATTTN GAGATGCTGT CATAGACGTT

SEQ ID NO:1957: (Length of Sequence = 328 Nucleotides)

TGTGATGTT CITTTTAGC CIGTTGATGT GGTGAATTGT ACTGATTGAT ATTTGAATAT TAAACTGGCT TTGCATCCCT
AGAATATACC TCACCAGGTC ACTGTGACT AGGTTGGTGC AAAAGTGCTT GCCATTTTGG ACCATGAATT TTGAATCATT
AAAACTAGGC TCAAACACAT CIGTATTAAT CAAAGTAAGA ACCATTACAA TCAACACAAT TTTGCCCAACA AGAAATAAGT
TTGTTTACTC CTGTAGCATA AAAATCCGTG CTTTGAGATT CGAGGAACTT TTGCRAAGCA CTTTCTGCAT CCTGCTGGTT
GTGGAAGC

SEO ID NO:1958: (Length of Sequence = 254 Nucleotides)

CTAGAAAGTA TCTTCTCTTT ATTTAAGTTA AACAATTTTC AAGGATGGIT TCCATCTATA AAATGGACAA AGTACAAGCT CTGTACAGCA GITCTTTTTA AAAATCAACT GGAAAAAAAA ATTACCAAAC TATATTTTGA ATTTGCAAAA CATACTCACA GATACCATCA TCTGAGCTTT TATGAGGNCA TAAGAAAGGN CCACCACAGA GAAGACAACT AACTTCGGCA CGCTTTGCTC GAAGGGCTCT TAGG

SEO ID NO:1959: (Length of Sequence = 259 Nucleotides)

GTAATACGAG AAAAATCACA ACAGAGTAAT AAAGATATAA AACTITICACA ATTAACACTC ATCAGTGTGA TAAACTAAGC CCATGTAAAA GTAAAAATCT CTCACAGTTA ACAAACGTCT TTACTITICAC TAAGAAGGAA CTGAAATTAA AGTCCTTAGT CACTTTGGAG GTGGCTGCAA AAGCTCACAA CATAGTTGAT CCTTAAAATA ATTATGAATG GCAACCAGTG CTGCCTTTCT GTACTCAACC ATGCAACTG

SEO ID NO:1960: (Length of Sequence = 329 Nucleotides)

GACTACAGGT GIGCCCCACG ATGCCIGGCT AATTITTAAG GITTITGIAG AGATGGGGTC TICCIATCIT GCACAGACTG
GIGTIGGAATT CCIAGCICAA GCAATTITCC TGTCTCAGCC TCACAAAGTG CIGGIATTAC CCGIGTIGAGC CACCGIGCTC
AGCCCAGTCA TGTATTTCTA ATTATTGIAT TTGTGAACTA ATCTATGAAC AACAAAAACA AACAAACAAA CAAAAAAGGGT
GGCATTTCTG GGCCACCAGG GAAGGTGGGA TTGGGGTTGC AGCTATTTTC AAATTATATT AAAAGCAGGA TCCCAGTTAG
AGCCCTATC

#### SEQ ID NO:1961: (Length of Sequence = 282 Nucleotides)

ATCCTCCCAC CTCAGCTTCC CAAAGTGGTG AGATTACAGG NTCGAGCCAT CGCACCCGGC CCAATTATTC TTTCTAAACC
ATTTCCTCTT CTGTGTTCAT GCCTTTAAAA ATAAAATTAA AAAAAAAAA AAAAAAAATC CTTAAAATTT CTCAGGTGTT
TTCCATATCA TTTTATTATC AAGAATATGG CTAATCAGAA GTCACAGCCA GCCCCCGAAC TACAACTACA AAACATGCAT
ATTATAGGCT ACACTGAGGG ATTTCTGAGG TTAGCAGATG CA

#### SEQ ID NO:1962: (Length of Sequence = 328 Nucleotides)

TECTEGIETO COTECTETA TOCTOAGGAG GOCARATOAG TOCCAGOOTO TOCCACCATO TITOCOTECAG CEATITOTTO
GAGOTOGARA CATOTOTGGO GITGITOTGG CIGACCACTO TEGTECOTTO CATAACARAT ATTACCAGAG TATTIACGAC
ACTECTERGA ACATTARTGI GAGOTATOCO GARTGGOTGA GOCCTGRAGA GGACCTGRAC TITGIARCAG ACACTGCCAR
GGCCCTGGCA GATGTGGCCA CGGTGCTGGG ACGTGCTCTG TATGRGCTTG CAGGRGGRAC CARCTTCAGO GACACAGTTO
AGGCTGAT

#### SEQ ID NO:1963: (Length of Sequence = 277 Nucleotides)

CCAAGAGACA CCCCCCGCAC TCCTGTGCCC GAGCTGCTC ATCTGTGATT CACAGTCTGC TCTTTCTGCC TGCTTGTCGT
GAGAAGTGAT TTTNAACCCC GAGGTTAGAA AGGGAGCTAT TTTTGAGCTG CTTTTTGTTA AAAGGCAAAT TTTCTGCTGG
GGACTGGCTT TACCCCGTCT ACCTAAATCA TTTCTTACTG CCTCCTGTAA CAGTCGCCTT TTGTGTTCTG CTGGNATTTG
TTTGAACACA GTCCACAGGT TCAGTGGTN CATCTCT

## SEQ ID NO:1964: (Length of Sequence = 230 Nucleotides)

CAATGCAACC TITTAATTCC AAGCAGAGTC CCCCTCCCCC AGCATGGTCA CACACAGGT GGAAAGGGAT GTCAGGGTCT GGGCAGGAGC AATACCCAGA CCTGGGCAAA AATATAGATA TCATTATATA CACACGTGGA CTGGAAAGAA GTCAAGCTGG GGGTGTAAGG TAGGGCAGGG GCAGGTGAGG AAAGCAGCTG GGGGGCCCCC AATAAATTAC ATTCTTGAGA

## SEQ ID NO:1965: (Length of Sequence = 299 Nucleotides)

CECCETGEAT CCCEAGAAGG CACAGCAGAT GCGCTTCCAG GTGCATACCC ACCTTCAAGT GATTGAGGAG AGGGTGAATC
AGAGCCTGGG CCTGCTTGAC CAGAACCCCC ACCTGGCTCA GGAGCTGCGG CCCCAAATCC AGGAACTCCT CCACTCTGAA
CACCTGGGTC CCAGTGAATT GGAAGCCCCT GCCCCTGGGG GCAGCAGCGA GGACAAGGGT GGGCTGCAGC CTCCAGATTC
CAAGGATGCA GACACCCCCA TGACCCTTCC AAAAGGGTCC ACAGAACAAG ATGCTNCAT

## SEQ ID NO:1966: (Length of Sequence = 320 Nucleotides)

GICCCIGCAC AIGCGICIGG CAAGACGGGI CAGCITIGIG GICTGAAGCA GGAAAGITIG TCIGINCITA GCCAGIAGCI TGGCCCIGIT GGCGCTGGIT GIGIAAGGAG AGAGACITIG AGCITCAGGI CIGGATAAAI NACCCCITGA GIGIGGCICC GIGGIGCCCC GAGIGGCCCC CICAAGCIGA GITGGGGICI TCAGICCCCC ATACTICITC CAGIAGATCC AACAGGAAGC ACAGAGGCGG CACIGCATGI TAGGIGGGCC CCAGGCATAC CACIGAGCAG ACIGIGIGGI GIGGCAACTC TCACAAGICA

SEO ID NO:1967: (Length of Sequence = 296 Nucleotides)

GCTCTGCTGG CCGTGCAGAA GCTCATGGT CACAACTGG AATACCTTGG CAAGCAGCTC CAGTCCGAGC AGCCCCAGAC
CGCTGCCGCC CGAAGCTAAG CCTGCCTCTG GCCTTCCCCT CCGCCTCAAT GCAGAACCAG TAGTGGGAGC ACTGTGTTTA
GAGTTAAGAG TGAACACTGT TTGATTTTAC TTGGAATTTC CTCTGTTATA TAGCTTTTCC CAATGCTAAT TTCCAAACAA
CAACAACAAA ATAACATGTT TGCCTGTTAA GTTGTATAAA AGTAGGTGAT TCTGTA

SEO ID NO:1968: (Length of Sequence = 311 Nucleotides)

ACCCCCTTCA CTCCCTCCCA CCAGCTCTGC AGCCAGCCTA TGGCAATTAT ATTITAAGAG GTGTTCCCAG GACTTTTGGG
ACCTACTAAA ACAATGATGG TTATTTTAGA TGTGATGATT TATATTTATG TAGAGATATT TCTGGACCAC TCAAGCTCTT
CGATACCAAA ATCAGGAGCA TCTTGGGATT TATTAAATTA TGTAAGAAGA TAGCACAGAT ATCGGGATAT TATTGTGTGA
AAATGCTGCT TTTACTTTGA TGTGATCTCA TTGATGTACA CAACCAAGTT CCAATAAAGT GCTAGAATGT G

SEO ID NO:1969: (Length of Sequence = 266 Nucleotides)

CAATAATAAA AAGGATTATA TTCCTGATAC ATGCAATATG GGTGAACCGT AAAAATATCA TGCTGAGCAA GAGAAGCCAA ACACAAGAGA ACATGTTGTT ATGATTTCAC GTACATGAAA CTTTAGTAAA GACAAGTCTA ATCCATAGTG ACAGAAAGCA AATCAGTAAC TGCTGACAGG GGCAAATGAG GNGATGATCT CAAGGGNACC TTCTGGGGTA AGACGCTGTT CTGTATCTCG ATCCNATTGG TGGTCACACA AGTGAA

SEO ID NO:1970: (Length of Sequence = 317 Nucleotides)

CTCGGGAGGC TGAGGCAGAA GAATGGTTG AGGCCAGGAG GCGGAGGTTG CAGTGAGCCA AGATTGCGCC ATTGTACTCC AGCCTGGGCC ACAAGATTGA AACTTCATCT CGGGGAAAAA AAAAATGAGC TAAATACAAG AGATGGTAAT GCAGGAAATG AGAGAGAAAG AAGCTATAGA ATGCACCATC AGTCTTTGCT GAGAGGAGAA GCTAGGACAC TTATGCGCAT GTNCCTGTCT GCCTTCCTTC CCGTCCCGCG GATGGTTGGA GCAGGTCTTT GTTTGCTGCA GAGCATGCCA TGTCATCCTC CTTGTCT

SEQ ID NO:1971: (Length of Sequence = 263 Nucleotides)

GTGCATACTG CTGAGGCGGC TACGCTGGCA GGGTAAGCAA AAGAAGCACC CCAGCCTAAG TITACAGAGA ACCAGGACAT CATTTTGAAT ATAACTTAGT TCTAATAGTC AAATGGCCAC TCAAGGTGAC AAATAGGAAC TTCAGTGGTC ACCCCTCGGA AGCAAGCTTT CAATGTCCCC CACCTGTAGA AGGCTGAAAA ACATCCTCCA AAGATAACAG GTTCCAATCA CTGGAACCTG TATTACTTAT TACCATTAAA TAT

SEQ ID NO:1972: (Length of Sequence = 295 Nucleotides)

GACAAAGAA GCAGAATAAT TITACCIGAG AAGAAACCAG GAGGCITCIT CITCTTCTC TCTCTCTIT TITTTTTTTT
TTTTTGACIA TACAGAAGAA AACIATCAGA GITAGGITAG AGAGTIGGGT TIGGGGICAG GITGIAGCAT GIGITATATT
ATGGGITAAA TIGIGICCTC CCCAAAATTA ATATGTIGAA GICTTAACTC CCTGTACCTC AGAATGTGAC CNCATGGGGA
AATAAGGICA TIGCAATATA ATTAGGTAAA ATAAGGICAT ACTAGAAGAG GGTAG

SEQ ID NO:1973: (Length of Sequence = 243 Nucleotides)

AGACCECAGI CATCCTCAGC ACTACACECA GECCATNINC AAGCTGACCG CAATGCTCAT TAGCAGIAAA GATTGINACC CECAGCTCCT TCATCATCTG INCIGEGGIC CCCTCCGGAT GITCAATGAG CATGCCATGG AGACGGCCCT GGCCTGCTGG GAGTGGCTGC TEGCTGCCAA GGATGGAGTG GAAGTGCCGT TNATGCGGGA GATGGCAGGG GCCTGGCACA TGACGGTGGN GCA

SEQ ID NO:1974: (Length of Sequence = 304 Nucleotides)

GGATGAGATG ATCGACGTCA TCGGGGTGAC CAAGGGCAAA GGCTACAAAG GGGTCACCAG TCGTTGGCAC ACCAAGAAGC
TGCCCCGCAA GACCCACCGA GGCCTGCGCA AGGTGGCCTG TATTGGGGCA TGGCATCCTG CTCGTGTAGC CTTCTCTGTG
GCACGGCGTG GGCAGAAAGG CTACCATCAC CGCACTGAGA TCAACAAGAA GATTTATAAG ATTGGCCAGG GCTACCTTAT
CAAGGACGCC AAGCTGATCA AGAACAATGC CTCCACTGAC TATGACCTAT CTGACAAGAG CATC

SEQ ID NO:1975: (Length of Sequence = 233 Nucleotides)

CCTTCTCCAT CACCCTTGGA CCCTCTCTGA GTGGTCTCTC AAGGCACATT TATTTTCTCT GCTGCAACCT ACCAGATCTG
ACATCCACCT CCCCCAGCAC CCATGGGCCA AGGAGGCCTG GGGCAGCCAA GGGGAGTTCC AGGACCAAGC AAGCAAGAAA
CCGTTCTTTG AACACATGGT TAAGCTTCTT CCAGCATGGC CCTAATTCCC CTACCTGCCT AAGCCAGGGG AGT

SEO ID NO:1976: (Length of Sequence = 162 Nucleotides)

SEQ ID NO:1977: (Length of Sequence = 270 Nucleotides)

GECTGAATTA AGAGCATCCA GAAAGCCCAG GCCCTCCATA GECTGTGGCG GGATGATCTT CACTTTGATC TCTTTGGTGG CATTAGGTGT TGTGTTGAGT GGCTTGTATT TCTTCTCTGC AGGGGGAGTG GCATCTCCTG GAGCAGCTAC GTTGCTCTGA CGTTTGAGGG GGATGGGTTT AAGGTTGTAC TTGTCAGAAA CCACCACTGT GCTGGCATTC TTCTTCACAG GCACCAAGGA TGGTGTCTCC AGCTCTAGTC CAGTGGAACG

SEQ ID NO:1978: (Length of Sequence = 167 Nucleotides)

TIGCAGGAGT TECTGATATT TATTCAAACG TCATCCATAC AATAAAGAAC TCINCTITIA AAATTCCATT TACATCAGCA
GTTAAAAAAA AGTGACAGTG GATGAAACAT GANGCTGTAA AGTGCCTTTA TGGGGAATNC AGCCACGCCT GCCTCCACTG
TGCTGGG

SEO ID NO:1979: (Length of Sequence = 346 Nucleotides)

CATCATAGCA ACAAAGGGCT ATGTACTATA CTCAGGAAAA CCATTTATTT GCACTGGAGG CAACTGTTCT TGAGAGAGGA
AAAGTAAATT GTCCAAGATG TAACATCTTA TAAATAGCAA AGCAAGGATG AAAATTATTA TATTTNACTA AATCAGTATG
AGAATCCTGA TTCTTCATTA TTATATCCCC AACACTCTAT CAGTTTGTTG AACAAATCAA CAAATAAGCT TGAATAAAGG
MTCCACATCT CAATTCTCCT CCACCATTCT ATATTGCCCT TCATCCCTAC ATTAAAATCN TTATTTCTGC TTTTTTTCTT
TAACAATTTA TCCCTAAAGT AACTAG

SEO ID NO:1980: (Length of Sequence = 174 Nucleotides)

CACAAACTGA CAGAGGAGAC AGGAGGAATT TAATATTACA TGCTATAATG ATATTTATCT CACAGTTTAT ATTTCATTCA
TTIATATTAT TTTTTTAAAA GGTTTCTTTA TCAGCTACTA AACATCTCAG CAATTTGGTG TGCATAGCTC TAGATTAAGC
AACAAAGAAT TGTA

SEO ID NO:1981: (Length of Sequence = 276 Nucleotides)

TGENTCACTC ATAAGTTTTC AGTGGTTAAT TACTACAGTT TAAGAAGACG TGTGATTTAT TTTTAGATCT GACCCAGCAG ATCATACCIN TNCNITGAAT TACATGGTCT TCTTTTGGCT TCTAAGATGT CACACTCCTG TCTTAGTGGC CACTGCTCCT CAAGCCCCCT TTGCTAGCTC TTCCTCATCT GTCCAGCCCT AACCTGACCG TGCTATGTAA GTCTTCTCCG TNTTCACCCC CTNCCNGGGT GACCGTTATA CTNCCAAACC TACAGG

# SEO ID NO:1982: (Length of Sequence = 288 Nucleotides)

GCTGCAGAGA GGTTGTINTCC AGGAGCAGGC TTTCCCGCTC GGGATCCAGG TCATCCCCCA CCAGAGAAAT TTCACAGCCA
TCCAGGTTGT GCACAATCTC ATCCGACATG CGTGTINTCTG TCACTGTGCC CTGCCAACTC TCATCCTTTT TGGCCTCCAC
CTGGTGAGAA ATGGAGCAGG TGATTTGAAG ATCAGGGAAC AAAGGGACGC CGTTGGTTCC CTCAAAGTCC ACAGCTNGGC
GGGCAAAAATG AGCAGTGCCA CTCAGCAGGA TCTGGGGGGC GTCAGCCT

## SEQ ID NO:1983: (Length of Sequence = 273 Nucleotides)

CACAAGCCAC TITICAGCCTC CAGTGGGAAG GCTCCAGCCA CACGCCGATA TITICGTCCTG CITICCCGTCA TCTCATATCT
AAAAGTCATG GCTTAAGTTA GGCAATAAAA CCTGTGGCTT TAGGCATCTT TAGTAAAAAA GCTGAACAAA TCCCAAATTT
ATTCCCATTT TCTTGAGAAA TAAACTTCAT AAAACAACAG ACAGCTGTCA TGATTACTGA GTTTTGGCTG ATGGCGAAAT
AATTTTTATG TAAGTATACT GAATAACAT ACA

# SEQ ID NO:1984: (Length of Sequence = 221 Nucleotides)

GAAGAGGCTG CTCTGGCCTG GGACACCCCC ACTGCTCTCA AGGAGCTGGC ATCTCAGTGG CCTCTNAGCC CAGCCTGAGC
CCTGTGGGAG TNCGGGGGCA GTGACTGGAA TGTNCTGCTG GGCAGGCTGC AGCAGCCGAG GTGGCCCCAG GGCAGAGGAG
TGCAGCGCAN CTCATGGGTG CCCTATGCCA CCCCTGGTGC TCACTGGGCT GCTGATGCCG T

#### SEO ID NO:1985: (Length of Sequence = 197 Nucleotides)

TTGCTACCAT GAGGGAAGTG CTCGTTGCTT GGCCTACAGC AAGINATACA GCCTGCGAGG CACAGTCCCC AAAAGTCTAG CTGCAATTCT ATTGGTGGTT TTCCCCAAAC AGCAATAACA AGATGTTACC TGGAAGCACA CCAGAGCCAA TCATGACTCA GGCCTGTCTA GATGTTTAGA TGTCTGGAAA TATATTT

## SEO ID NO:1986: (Length of Sequence = 268 Nucleotides)

#### SEO ID NO:1987: (Length of Sequence = 282 Nucleotides)

GTCCTCACTG TAAACAAATG AGGATGGAGG ACACTGAGAG GNTCAAATAT GAAAGGCAGT ATGGGGAGIT AGAGCCACTC
GTCTACTCCT GTAAAGAGCA TGACTACTCA CAGTCTTTCT AGCGGGTAGT CACTCTTTCA TTTAACAAAT ACTTAGTCCC
TGCAATGATC TAGGATAATA ACTCAACAGT GTATATCAAG AGCCTTTAAA AAGTTATACC TGGCCGGGCG CAGTGGCTCA
TGTATGTAAC CCTAGCACTT TGGGAGGCCA AGGCAGGCAG AT

## SEQ ID NO:1988: (Length of Sequence = 226 Nucleotides)

GIGAGGGGT TOGGTCTCTC AGGAAGTTAG GCCATAATTT CTGCAGGTTC AGTGATTAAC TTGGATCCAT CCCATGCTGT CTTGAACTGT TCAGGAATGG GAAATTCTCT ATAATCACCA TCCTGAGGGA TAAGTATGTT CATTTCAGAT GACTTGGCGC TCACGNTCTC ACAGTCTAAT GCATCTTCAC TGAGGTATAT GTGGCAACCT TCTGTCTTAT TAATGG

SEQ ID NO:1989: (Length of Sequence = 193 Nucleotides)

CTCCCTGTAG GTCATGTCCT TGAGAGTTAA AAGATGGGTT GAGTAGGCAG AGGTCTCAGG CACCGGGGAC AGAAGACAAG GACATTCAGC ACGGGCAGCC ATGCTCTTCC CAGCACCCAG AAAAGGCCCCA GGGCCCGGAC TCCTGGGTGT GGTCATGAGA AGGGCCTCCG ATTCAGCCTC TTCTCTTCTT GTG

SEQ ID NO:1990: (Length of Sequence = 223 Nucleotides)

CTGCTTCATT TACCACCACC AGCCGATGGA CCAGTITATT GGATTCACCT ATGATACCAG GACTITTCCA TICAATICAA
TICAACAAAC TITTAGAGAT CGCCCCTATT CCAAGCTCAT CCAGGTTCTG CTTCATGAAG GCAGGCTTTG GCATATCAGA
CATAAAAAGC TGGAGGAACT TGAGGATTCT TITGTGGGTA AGTATATAAA GTGCATTCCC ACT

SEO ID NO:1991: (Length of Sequence = 385 Nucleotides)

GCAGAGAAAG TGCCAGGCAT CAACCCCAGT TTCGTGTTCC TGCAGCTCTA CCATTCCCCC TTCTTTGGCG ACGAGTCAAA

CAAGCCAATC CTGCTGCCCA ATGAGTCACA GTCCTTTGAG CGGTCGGTGC AGCTCCTCGA CCAGATCCCA TCATACGACA

CCCACAAGAT CGCCGTCCTG TATGTTGGAG AAGGCCAGAG CAACAGCGAG CTCGCCATCC TGTCCAATGA GCATGGCTCC

TACAGGTACA CGGAGTTCCT GACGGGCCTG GGCCGCTCA TCGAGCTGAA GGACTNCCAG CCGGACAAGG TGTACCTGGG

AGGCCTTGAC GTNTGTNGTT AGGACGGCCA GTTCAACTAC TNCTNGCACG ATGACATCAT GGAAG

SEQ ID NO:1992: (Length of Sequence = 312 Nucleotides)

GECTTACAGE ACAGAAAGET CCCTTCTCAC AGTTTEGGAG GTCCGAAGTC TGAAGTGAAG CTGTCAGCAG GGCCACACCC CCTCTGGATG CTCCAGGGGA GGGTCCTTTG CCTCTTCCAG TTCTGGTGGC TCCAGGCATT CCTTGCTTTA TGGTGGCATC ATTCATCTCT GCTCCGTCTT CACGTGGCCT TCTCTGTGTT GTCAAATCTC CTTCTCTGTT CTCTTGTAAA AACACTCGTC ATTGGGATTT AGGGTCCACC CCAATCTAGA TGGTCTCATC TTGAGCCTTT ACTTTAGTTA CCTCTGCAAA GA

SEQ ID NO:1993: (Length of Sequence = 429 Nucleotides)

CTGTTTTTAC TOGACGAGGA GAAGACCTTT TCATGTGTAT GGACATACAG CTCGTTGAAG CACTGTGTGG CTTCCAGAAG
CCAATATCTA CTCTTGACAA CCGAACCATC GTCATCACCT CTCATCCAGG TCAGATTGTC AAGCATGGAG ATATCAAGTG
TGTACTAAAT GAAGGCATGC CAATTTATCG TAGACCATAT GAAAAGGGTC GCCTAATCAT CGAATTTAAG GTAAACTTTC
CTGAGGAATGG CTTTCTCTCT CCTGATAAAC TGTCTTTNCT GGAAAAACTC CTACCCGAGA GGAAGGAAGG GAAGGACTN
ATGAGATGGA CCAAGTAGAA CTGGTGGGAC TTTNGATCCC AATCAGGAAA GACGGCGNCA CTNCAATGGG GGAAGCATAT
GAGGGATGAT GGACCATCAT CCCAGAGGT

SEO ID NO:1994: (Length of Sequence = 377 Nucleotides)

TGGGGTTGCC AAACCAGTTG CCCCTGTCCT GTGTCAGCCA GCTGTGGCAA TTTCACCCTT ATTCCTTGGA GAGGCCAGCT
GCCTGCTGGA AGGAGTCAGA AGTCGGTGGA TGTCATTGAG GCCTTGGAGG CCCCAGTINTG GCGGGAGAGA AATCCACACC
TGTGCCTGGA GTTCTCCTTC CCTGACCCTC TGAACCGGCG CTTAAAATGC TGTCCCGCCT GGAACAGGGA GGCCACATCC
AGCAGTGCGT CCTCAATGTG CTGCCCCAGC CTGTGGGAAT CCGTTTTTTGT GCTTGATTTT TTGCTGGAGA TGTGGAAGGT
GATCATGCCA TCCCCCATGA AGATATAAGA AACANCATAA CCATGGTCAT CAGCAGG

SEQ ID NO:1995: (Length of Sequence = 341 Nucleotides)

GGACCIATAT GGCCATGCTC TGGCTCTACC CTTGGGAAGC CTGATCCCGG TGTGTGGCCC AGCTTGTTCA GGCCCTGGGA
TGCTGCATCT CCAGGCAACT ATGCACTITC CCGGGGAGAG AACCAGTATG AGAAGTGGGG GCAGGGCACA CATTCATCTT
TGTACCTGCC TCTTTGGTTT GGACCTGCCC AGTCGGGTCA CTGCCTCCAC GTCTGAGGCC CCGCCAGCTG GCCGTCTGTC

CTCGCCAGCC TCAGGCTGCT GCGCTCTCTC GGCTTTTACG GACCTCTGAG GCCGAAACCC CACCTCGAAG TTTCCCCGTG
ACAGTGCGTC CGAGTCCACA T

# SEO ID NO:1996: (Length of Sequence = 316 Nucleotides)

GCATATGGTT GGTGAACAGT TTTGCAGCCC TAGGCTCCTG TACTGTGCGT GCACCGCCGC CCGGGCAGCC GCTGGCTCCA GCTCACGAAA CAGCCCCGGG CGCCGCCCG CTCTGAGTCC AGCCTCCTAC TGAGAACAGT CCCTCCCTTG TGCGGGTCGC ACGGCTAGCC GCAGGTTCGG CCACGTCAAA TCCATTTTNT AAAAAAGCAG GGAGCAGAGC TCTCTCTTCG CCGCCGACGC AGAAAGGAGC TNGGGAGGAA AAAGCTGCTG CCTTTTGCGC TGGAGATTCG TGGGCAAGGC TTCTCATTTT CCCAGG

## SEO ID NO:1997: (Length of Sequence = 320 Nucleotides)

GCAGGITTAT GITTITATIT AIGIATITTA ACTGACITAT TIGIGIATCC CACTAGAACA ATACATICAC AATATACITG CAGAACTGTG CCTGGGGCAT CATGGGGGCA GAGAACTTGT CCAGTGAATA GITGITGAAG AAAGGRGTAA AATCTCCCCC AAACCCTAAA GGCATCCTIT TOGIAGIGTG TGTCCCATAG GTATGGCTGC TGAGCACCAG GGCTGCTCAC CATGCTCCCA AGAAGCAGAG TCAGGGAGCC AGACAGCAG GTTTATTAAG GTGCACANCC ATGTCTGAGC CCCAGCTCTC TCCCNCTTCT

# SEQ ID NO:1998: (Length of Sequence = 395 Nucleotides)

TITGATGCTA TGGCGCTGGA CCCAGGGCCC TCCCAGGCCA TCTCTGTTCC TCTGGGGTGG TCCAGTTCTA GAGTGGGAGA
AAGGGAGTCA GGCGCATTGG GAATCGTGGT TCCAGTCTGG TTGCAGAATC TGCACATTTG CCAAGAAATT TTCCCTGTTT
GGAAAGTTTG CCCCAGCTTT CCCGGGCACA CCACCTTTTG TCCCAAGTGT CTGCCGGTCG ACCAATCTGC CTGCCACACA
TTGACCAAGC CAGACCCGGT TCACCCAGCT CGAGGATCCC AGGTTGAAGA GTGGCCCCTT GAGGCCCTGG AAAGACCAAT
CACTGGACTT CTTCCCTTGA GAGTCAGAGG TCANCCGTGA TTCTGCCTGC AACTTATCAT TGATCTGCAG TGATT

## SEO ID NO:1999: (Length of Sequence = 337 Nucleotides)

GAAAGTATTT GIGIGATIGA GICACACGCI GAATCAATCI TCATATAATG CCATITITIGC TTAAAAGAAT GCCAGACTIG
GGCATTAGGC TGACATTTC TIGAAAACAG TGAGGCITTG CITTAGGGAA AATAGTGGTA GIATTTATGG TCGATGATAA
AGTICCTAGA TITTAAGCAA AAATTITAGA AAGCTTGTAT CAGCTGCTGT AAGTATATAA TGAAATCTGT CATTATTTGA
TTATCTGCAT AACTGAGTCA GIATTTCCAA ATGATCAATG CATAGTATTA TAAAAATCAT ACATGGGTAA GAAATCTTTA
CAAAGTGTCA GCTAGAC

### SEO ID NO:2000: (Length of Sequence = 329 Nucleotides)

ATGIAGCCCC CTGCTGCAAA GGTGCCATCT TTTTNCTGCT GCTCACACAG CAGCGTGCTC AGGGCCTGCC TGCATGGCAG
NNTCATCATG GGGAAGCCCA CAGCCACTGA CATCATGAAG CCCCACAGGGA GCATCTCCGT CACCAGGTTG GAGGGAAAGT
GCATGAGCAC GTTTGCCGGC CGTGGCCTCG GTGAAGCTGA CGTAGCCGAA AAACCCCCACC ATGACGTAGG AAGGTGGTGA
CCACATTAAG GGAGGAAGCA AATATGGAGC TCATGGTTTT CACTTGACGG GCTCATCCAG GCTGTCGTAG GTGGGCAGCA
CCTGGGACT

# SEQ ID NO: 2001: (Length of Sequence = 308 Nucleotides)

AAGTCTGGGG TITGGTAGGC TCCCAGGATT TCCCTCAGCA GGCATTTGTG CTGCCGCAGG GCCGTCTGGG TGCCCCGCAG GTCNTCCTGG ATGCTCTGTA GCCTGCGGTG GAACGACTCC CTCACTGACT GTGTGGCAAA GCTGAGCTCT GCCCTGACCC ATGTGGCATT GGCCAGGATG GGGGCCANGC CCTGTGGGAT GCTTTGCTGC CCGTNTCCTG AGGCACCGAC TGCCTCTCCT CCCAGTGTCC CCAAGTGCTT CCTCAGAGAC TCAACCTGGN TCCAGAACTC ACCATCCACT AGGACCTT SEO ID NO:2002: (Length of Sequence = 242 Nucleotides)

AGCCAGGCCC TGGGCCCAAG CCCCTTGTCC CTTCTCCACT GCCCCTCTTT CCAGACAGIA AAGGCCATGG TCAGIGTGTT
TTTCTCTTGT AAACAAACCC CAGCTTGTTT AACAGAAATG CTAATAACCT ACTGGGAAAG ATGGAGGTCT AAATTACCTC
CAGGGTTTTT CTGGGGGTTT ATCACCAGIG TGGGTCCCTT CTGATACCAC CAGGTTCACT CCAGGCAGAG TGGGGCGGAA
GG

SEO ID NO:2003: (Length of Sequence = 328 Nucleotides)

ATATTCTCAC TTATAAGTGG GAGCTAAATN ATGGGAACAC ATGGACGCAT AGAAGGGAAC ACTITTACAC TNCTGGTGGG
NGTGTAAACT AATACAACCA CTGTGGAAAA CAGTGTGGCG NTTCGTTAAA GAACTAAAAG TAGATCTCCC GNTTGATCCA
GCAATCCCAC TACTGGGTAT CTACCCNNAA GAAAATAAGT CATTATACAA AAAAGATACT TGCACACACG TTTATAGCAG
CACAATTTGC AATTGCAAAA AATATGGGGC CAACCCAAAT GCCCATCAAT CAATGAGTGG ATAAAGGAAA TGTGAGATAT
ATATATAT

SEQ ID NO: 2004: (Length of Sequence = 211 Nucleotides)

AGCCITITIA TEATIGINIT TITTITITT TAANCGAAGG TCCCTTACTG GTCCTGCTTC CATGAGTAGC CGTGACCAGG GCAAAAGGGA GAGGAACCAG CCGCCACAGG GAGGGGTCAT CTCCACAACA TTCCATTIAT ACACAGAACT AAACAGACAA GCACAGNGTC ACTATTGCGG TTAGAAGTTG GCAGCATGGG AAGGGGGAGG A

SEQ ID NO:2005: (Length of Sequence = 241 Nucleotides)

SEQ ID NO:2006: (Length of Sequence = 266 Nucleotides)

TTCCCCCTAA CCTTGTGAGT GGGCCTTTTA AGTAGTAAGT AGTATACACC TAGATATGGA TAGATAGCTA GGTGACCAAA CCTAATGGAT TAAGGCCATC CTCGCCTAGG TCACTTACTA AAGATCAGGT CATATGTCAT ATCGTTCCTG TGCTTTTTAG AACGTATTTG GGAATGGGT CCAGATTTTT TTTAAACACA TATTAAAGAT TATTTATATT ATGCTTTGTT TCCGAAAGGT TTTAAGGTGG ATTAAAATAT AAGATT

SEQ ID NO:2007: (Length of Sequence = 419 Nucleotides)

AGAAAGAGGC TTCCTTCTGC GGAGGCAGGT GGAGCACAGG GAGGGCTCCT GGGAGGCACA GGAGTGGGGT GGGGGCCAGG

AAGGGGGAGG TGGACAGAGC GACTTGGATA AGGCTGGGCC GGGCCCACGC CCACCTCAAG AGGGGGGCCG CCTCCTCAGG

AGGCATCAAG GTGCCAATCCA GTCTTCCTTT CTCTCCCTGA AGACCTGAGT TCCAGCCTTC ACAGAGCGTC ATGCGCATTC

TTCTTTCTGG ATGCTAACCC CAAATCCGAC ACTCAATGGT GCACCTCAGG TACCTGCCAA GGNTCTNTGG GCCCACATGG

AAGGTGCAGG GTCTGGGTCC CTGGATGACG AGGTGAGGGG CAGATGGGTG ACCAGGGAAG GGCATGACCC AGAGCTNCCG

GGACTCATGG AGGATTNGG

SEQ ID NO: 2008: (Length of Sequence = 360 Nucleotides)

CTTTTCTGGA GAAAATAATA CGCTCGTTCC TCTAATTAGC CCATCGGTTT CAGGTTCATC ACTCTGCTAT CTTCTCCTGG
AGTTTACACA AGCCCTTCAG AGTGTAAACA CCGATGTGGA TTCAATCCCA CTCATTATTT TTTTCAATAA AAAGAGAACT
GTTTCAACAG ACAGGTGTTG TTTCCGACAT CATCAGAGAG GAAGGTGGAT GGTTCTATAC GGTAAGCATT CTACCCTTCA

GCTGCCAGGG ACAGATCCAT AAAANTCCAA AAAGGGAAGA GAGAAACAGC TTGAGTACAG CTGAATCATT CACAACAATA TTACAAGCAA TTACTTCAAT GGTAAAGTCT CCAGTCTAGA

SEO ID NO: 2009: (Length of Sequence = 411 Nucleotides)

ATTACGGGCA CCIGCCACCA CGCCIGGCTA GITTITGIAT TITTAGIAGA GACGATGITI CACCATGITG ACCAGGCIGG
TCICGAACTC TIGACCICAA GIGATCCACT CGCITCCGCC TCCCAAAGIG CIGGGATTAT AGGCCGIGAGC ACCIGIGCCC
AGCCTCACAG CIGCATCITA ACCITTACCIT TGCCTCTGCC TCICAAGCIG GIACCTCCTA ATTTACATCC TAAGAGIGGA
ACCATGIGAC AAGGACTGGA GIGCCATTGG CIGIGGACTG TTCAGGCAGG GAAGIACAAG ACCACTCITG TATTCAGGCG
CAACCAAAGG AGAGAATTAC GIACTTGITG AGIACAAACT GCACCAAGCC CIGGAGACCC ATTACCACCG TTAACCCTCA
ATTACAGCTCT G

SEO ID NO:2010: (Length of Sequence = 311 Nucleotides)

AAGAAAGATG CCAGCTCTIT ATTACCAGGG AAGCTGTGTG CACGCGCGTG GAGGGINCCT NTGGAGCTGA CCGGGCCCTT
ACCTTCTCCT GCTTGTCAGA GGTGAGTCCT GGTACCCAGC ACGGTGGCCT CCGGGAGGCT TTGATAGGTC AGCCTTTGCT
GCCTCCCAGC TCAGGGCTCC TCCAAGGAAC CTGCGGGGCC CCATGTGCCC ACAGCCCGAG GAGGGAAGCA CCGACCGCCC
TCCTCGTGGC CAGTTGACAC ATCATCCATT TATTATCCTT CAGAGTCTAA AACTTCCTCG TGATACAACG T

SEO ID NO:2011: (Length of Sequence = 192 Nucleotides)

TCAGGACATT TCAGTGAGGC CACCTACAAG CAGAAAGGAG GCCAGGCT AGGGACAGAN TGGCCCCAGA GCCAGTCAGC TGCAGCAATT CTTGTGAGAA AGGGAGGGCA AGCTGCCAGA GCANTGINGC CCAATATGAT GCCTACACGA GACAGATGTC CCCAGTAGAG TGTGTTCAGT GACCTTCTAA AC

SEO ID NO:2012: (Length of Sequence = 367 Nucleotides)

GGATGACCIT CGAGGACGIG TGCCGGTACT TCACGGACAT CATCAAGTGC CGCGTGATCA ACACATCCCA CCTGAGCATC CACAAGACGT GGGAGGAGGC CCGGCTGCAT GGCGCCTGGA CGCTGCATGA GGACCCGCGA CAGAACCGCG GTGGCGGCTG CATCAACCAC AAGGACACCT TCTTCCAGAA CCCACAGTAC ATCTTCGAAG TCAAGAAGCC AGAAGATGAA GTCCTGATCT GCATCCAGCA GCGCCCAAGG CGGCCCAGGA CAGGGGGGG CAAGGGTGAG AACCTGGACA TTGGCTTTGA CATCTACAAG GTCGGAGGAGAA ACCGCCAGTA CCGCATGCAC AGCCTTCAGC ACAAGGC

SEO ID NO:2013: (Length of Sequence = 213 Nucleotides)

GATTITATEG AAAAAAATTI CCATTITINI TAAGAAATAA EGAGTITINIG TETCGAEGGC ATGACTACGA GAGGCTEGAA GCTTCCAACA GAGAATECTE AACGANITCC CCCATGCCAT CGCCATGCAG CACGNCAACC AGCCCGATGA GACCATCTTC CAGGCAGAAG CTCAGTATIT GCAGATATAT GCTGTGACTC CCATTCCAGA GAG

SEO ID NO:2014: (Length of Sequence = 333 Nucleotides)

GITAAATAAA ACAGCAAATT CTTAAATACA TTATGAGTAA AGAAAGATTA AAATAAGGNA ACAGTACTTA CIGIGCAACT TTAAAATATATA CCAAGTAAAG TACACCACCT ATTCACTGAT AACATTITCC CTACGTTGAA AACACAAAAC CTACTTATCG ATATTTTTGA TATTAAAAAA AAGGACATTC ACTATTGTAG CCCTGACAAC TCTTCCAGTA TTTTTAACCA TTCAGATGTA TTATGGGGN ATATTTATTA ACATAATTN GFTTAACACA TTTCTTTCTA CACAAACTGA ATTTTAAAAAG TGTCTATAAC ATTTTCAATT ACA

SEO ID NO:2015: (Length of Sequence = 179 Nucleotides)

NCACCACTTA TIGICITCAA ACATTATIGC ACTITAACTI TCTTAATTIG ACAAAGCATI CAAGAAACAT CIGCAGACTA
GITTTAACAG ACAAATAACA CCIGTAAGCA GACATGACIG TCCTAAATTIG TITATTAAGA AAGTTAAAGN GCAATAATGI
TIGAAGACAA TAAGIGGIG

SEO ID NO:2016: (Length of Sequence = 293 Nucleotides)

TTTTCCCTCC CCAGAGATGC TTTATTACAT GGTTTCATCA GTCATCAATG ATGGGTCCCT ATGCCCATGC GAGGAGACAG GAACATCTGT GTGGTACATG GCACTGTTCC CCTCTCAGCT ACGCAGTCAG ATGGGGGCAG GGGGATGAAT GGGTGCTTGG CTTCCCTGCT GTTGGGCAGG CTCTGAGATC TCAGCAGACA GAAATGAAAG CCTGGCAAAT AGGGAGGCAG GAATGTTCAA GCATCGGTGA CCTCCATGTT CTGCAGCCTG TTTTCTAGGG TGACGTCTCT TTG

SEQ ID NO; 2017: (Length of Sequence = 504 Nucleotides)

CECGIECTEG CCECGCTETE GECCECCEC INTECENCCC CAGNICICCIC GIOGCCCTEG ATATCTETIC CAAAAACCCC
TECCACAACE GIGGITTATE CGAGGAGATI TCCCAAGAAG TECGAGGAGA TGICTICCCC TCGIACACCI GCACGIGCCT
TAAGGGCTAC GCGGCCAACC ACTGIGAGAC GAAATGIGTC GAGCCACTEG GCATGGAGAA TGGGAACATT GCCAACTCAC
AGATCGCCGC CTCATCTGIG CGIGTGACCT TCTINGGNIT GCAGCATTGG GICCCGGAGC TGGCCCGCCT GAACCGCGCA
GGCATGGICA ATGCTGGACA ACCAGCATCA ATGACGATAA CCCCTGGTTC CAGGIGAAAT TNCINCGGAG GGATNIGGGT
AACANNINIT GITACGAAGG GIGCCANCCG TTTGGCCAGT ATTGGTACCT AAAGGCTTTA AAGGIGGCCT ANAGCTTAAT
TGGNAGGATN CCNTTINTCC ATGT

SEQ ID NO:2018: (Length of Sequence = 354 Nucleotides)

AGANCAGACC CACAGGCATG CAGAAAGGTA GGGCAGTATG TITAANTCCA GACTIGGCAC ATGGCTAGGG ATACTGCTCA
CTAGCTGTGG AGGTCCTCAG GAGTGGAGAG AATGAGTAGG AGGCCAGAAG CTTCCATTIT TITCCTTCCT AAGACCCTGT
TATTTGINIT ATTTCCTGCC TITCCGAGTC CTGCAGTGGG CTGCCCTGTA CCCTGAACCT CATGAGCCTC TAAGGGAAAG
GAGGAACAAT TAGGACGTGG CAATGAGACC TGGCAGGGCA GAGTACAAGC CCAGCACCCA GTGTCCCAGN CTTACTGGGT
CCTTANCCTG GGCCAAACAG GGAGGGCTGA TACC

SEQ ID NO:2019: (Length of Sequence = 295 Nucleotides)

GACACAACCI TITGAACTAT TECTECTIGIT TICATITIAA AAAGGAACTI TITAATACTAA AATTATAGGA AGAACATAAT
ATCTGACGIC ACGIAAATTC AGATTIGAAG GAAATTTACT TITTINCCIT ATTIGINCIT ATTITITCCIC ATTITIGITAA
GAACCAGCGA ACACTITGAA GAAAGCCAAA AGITTACATC TGGAGCTGGA GGGITCTIGIG ACTGCACACC AGGCACTCTIG
CCAGCCCTAC TICTGCCTGT AGICCTIGCAG GTCACTTGCC AGAGGTGGTA CTTTC

SEO ID NO:2020: (Length of Sequence = 217 Nucleotides)

ATTGGAACIT AAGITICACA AGGAAAGIGG TCACTITAGT TCACCACTIT CCITGIGAAA CITAAGITCC AATGGGAGAA TGACAGTAAA CAGACAACTA TTATAATANG TCCATGGAAG ATTTTGGTGT ATGINAGATT TNCAAATCTG TAGAGAAACN TNGGCTCATT CAATAAAAAT TTTGAAACCA TTGATTAATG TCTTAATAAC TATATGT

SEO ID NO:2021: (Length of Sequence = 380 Nucleotides)

TTTTTCTTA AAACAACAGC AACGIGATCT TGGCTGTCTG TCATGTGTTG AAGTCCATGG TTGGGTCTTG TGAAGTCTGA GGTTTAACAG TTTGTTGTCC TGGAGGATT TTCTTACAGC GAAGACTTGA GTTCCTCCAA GTCCCAGAAC CCCAAGAATG GGCAAGAAGG ATCAGGTCAG CCACTCCCTG GAGACACAGC CTTCTGGCTG GGGACTGACT TGGCCATGTT CTCAGCTGAG CCACGCGCT NGTAGTGCAG CCTTCTGTGA CCCCGCTNTG GTAAGTCCAG CCTTTCCAGG GCTGCTGAGG GCTGCCTCTT GACAGTGCAG TCTTATCGAG ACCCAACGGC TCAATCTGCT CATCCNTAAA GTGGGGGGATA

## SEQ ID NO:2022: (Length of Sequence = 223 Nucleotides)

GGTCACACAG CTAGTTGGTA GAGGAGCTCT TCCATAAGAT AGCAAGGCCA CATCACCTGC AGGGCAGTGC CTGCNCTGGG AGGTGGCACA ATGTGCCCAAG TGATGACGAT GACAATAACT ATGAAAGGAT TTTATATTTG CACAGCATTT GGTTGCCTGA TCTTCGATGA GGAAGAGCTC CTGCCGATGT CTGCTGAATT GTGCAGTAAA ATATTCAGGA TGG

# SEO ID NO:2023: (Length of Sequence = 294 Nucleotides)

TATTCTTAAG TTTGCACTTT ACAAAACCAC AAGGGAGAAG TCCTTGAAGG GGAGACAGGG GTAGGGGATT AGGGAGTGGG
GGATGGTAAA GAGGGGAAGA GGAAGACCCA GAAACGAAGT CCCCTCCAAC CCCATCTCGG GGACCAAGCA GAGACTAGGC
CTCAGGCTAG CCCAGCAGGG TTCCTGTGTC CTGGTTGTAC AGAGCTAGGC CAAAAGACCT CAGGGGAAGG GCCATGGCCC
TCTAGAGACT GCCGCCATTT GAGGGACAGC CACAGGCCAA TGTTTCCTGT GCCC

### SEQ ID NO: 2024: (Length of Sequence = 234 Nucleotides)

ATTTIGICGE GGITGEAAAC GICTICCTGE CTIGAGCTGG GAGCTTCACC AGGCTTCGGT GTAGCGGACG TCCACTTCCT TCAAATTGGG AAGCTTGGCC TTCAGATCTT CGTAGGTGTC AGCTGAGAGC TTNGTGCTGT TCATGTTTAA ACTGCAGAGA CTCTTCATGG AGCTCAGGGC CAGCAGGCCA GCGTCTGTAA CCGGGGTCTC GCACAGGTTC AGCACCTGGA GCAT

### SEO ID NO: 2025: (Length of Sequence = 327 Nucleotides)

AGGAACAAAT GITAAAGGGT AAGATAATIT CCCTGCAAAA GGAACAGGAA GGCAGTCTTA AGAAGATGAA TGGATGAGAG AAGGGAGAGA ATAAAATGCA ATAACGAGCC AGCATTTACT ATGTATTINN TCCTCACCTG TCTCTCCATA TTTAGGTCAC TTACCAGTTT CTGTGCCCTT TTGGAGCTTT TNTTGAGGGC TTCATTCTCA CCCTGTATTT CTTTAGCCCT AAATTGACAC TCTCTCCAAA AATCCATTCC ATTGTCTGTG GACCNAGATG TTCTATGTAA TTCAGAAGCA GAACTCTTGG CTAAAGGGCT AGTGTGG

# SEO ID NO:2026: (Length of Sequence = 328 Nucleotides)

TCAGTATAAA TITAAAAGAA ACAGCTTAAT GAAATACAAG TCAGTTTATT TGATATTCAG CCTACAGCTT TCCAAAGCAG CAGTTGAACA TGITGTTGAG TTTATACCAT TCATTCATTC ATTTATTTTT NCTTTCTTTC TTTCAGAAAA TACTGGGTGT TTGATATTTG TTTCACTGTG CTAGTTTCTG GGAATGTGTA AGGAAGAGGC TGGCTGTGG GATGAGAGCA ACTTGCTTTT TACAATAATT ATTTGTTATT GTAAATTAAC AATTTGCTCT TCTGGTATTA TATGGAAGTA TTTGATCCNG TTGATGGCAC TGCCTTTG

## SEQ ID NO:2027: (Length of Sequence = 307 Nucleotides)

AAGAAAGATG CCAGCTCTTT ATTACCAGGG AAGCTGTGTG CACGCGCGTG GAGGGTNCCN TTGGAGCTGA CCGGGCCCTT
ACCTTCTCCT GCTTGTCAGA GGTGAGTCCT GGTACCCAGC ACGGTGGCCT CCGGGAGGCT TTGATAGGTC AGCCTTTGCT
GCCTCCCAGC TCAGGGCTCC TCCAAGGAAC CTGCGGGGCC CCATGTGCCC ACAGCCCGAG GAGGGAAGCA CCGACCGNCC
TCCTCGTGGC CAGTTGACAC ATCATCCATT TATTATCCTT CAGAGTCTAA AACTTTCCTC GTGATAC

# SEO ID NO:2028: (Length of Sequence = 272 Nucleotides)

ATCCATTICT GCATTAACCI AGAGTTAAAA AGGAATATIG TITATIGITI GGCTCTCCCC ACTAGAAGIT TCACAGGNGC ACAGATCATA TCTACCATTI GAACAGCTCI CIGCCTGATG GCTAATACAT TINITGGCAT ATAGTAGGTA GGIGCTCAAT

AAATTINITA CAGGAATAAA TGAGATAGGA TTTTCAAGGG TATTINCTAT TAGGATITAA TAAAACAAAG TGATCTTTAG AGAAACAAAT CTCCCCCATCA ACATGCTATA CT

## SEO ID NO:2029: (Length of Sequence = 261 Nucleotides)

# SEO ID NO:2030: (Length of Sequence = 384 Nucleotides)

NNCONNEGAC CAACAGCAGC CAGAGCAGTT AGCCAGTTAG TCCCCAGGCC TGTGGCACAG GCGTTTCTGA CCTGCTGGGC
CGAGAATGGG TAAGTTGTCT GGAGTCAGGT GGGCCCACGT AGGACAGGGT CACAAAGCCT GGGTTTGTTT CTGGGTACT
TGCGCCTCTG GGGTGCTAGA GGTGGGGCAT GGTGGCTGGA AGTAAAACTG CCCAACTCTGG CCCTCAGAAC TCTCAGGTAT
AGAAGCCCAA GATGTCTAAT ACCCINTCCC AGTGCCCGAG AGCTGCCTGG TGTCAGGTAG AGAGGACACT GTACCTGGGT
GAATGATCAG ACCCTGGTAG CTAAGAAGGN ACTTGTCCCT TTAGTCAGTT TGCAGANCCC CTTT

# SEO ID NO:2031: (Length of Sequence = 261 Nucleotides)

ATCACAGAGG AGAAGCCACT GTTGCCAGGA CAGACGCCTG AGGCGGCCAA GGAGGCTGAG TTAGCTGCCC GANTCCTCCT GGACCCAGGGA CAGACTCACT CTGTGGAGAC ACCATACGGC TCTNTCACTT TCACTGTCTA TGGCACCCCC AAACCCAAAC GCCCAGCGAT CCTTACCTAC CACGATGTGG GACTCAACTA TAAATCTTGC TTCCAGCCAC TGTTTCAGTT CGAGGACATG CAGGAAATCA TTCAGAACTT T

## SEO ID NO:2032: (Length of Sequence = 344 Nucleotides)

CCCCTGCACG GCGTCTGGTT CTTCGGGGAA AACGCTCACC CACCCCTGGT AAAGGGCCTG CAGATCGAGC ATCCCGGGCC CCACCTCGAC CACGCAGCAC CACAAGGCCAG GTCACCCCAG CAGAGGAAAA GGATGGACAC AGCCCCATGT CCAAAGGCCT AGTCAATGGA CTCAAGGCAG GACCAATGGC CTTGAGTTCC AAGGGCAGCT CTGGTGCCCC TGTATATGTG GNICTCGCCT ACATCCCGAA TCATTGCAGT GGCAAGACTG CTGACCTTGA CTTCTTCCGT CGAGTGCGTG CATCCTACTA TGTGGTCAGT GGGAATGACC CTGCCAATGG CGAG

# SEQ ID NO:2033: (Length of Sequence = 373 Nucleotides)

GGAAGAAGA AAGAAAGAA GAAAGAAAGA AAGAAAATGG CCCCATAGTG CTTAAGTCCT CAGACATGTG TCCTGGTGCT
GGGGACAGGG CTTCTGACAT TCTCTCAGGT CAGTATTTGC AGGTCATCCA CCTTCGACTT CAACACATGT GACCAGAAAC
CTTCCCCAAGG CAGCCATCCA CTTTGCTGTC CCTCCGACGG CCATGGCTGA CCACTGCTGC TGCTGTGTAT CCTCGGTGAC
ATCTGGCCTT GGCAGCCTAT GGATTTNTGC CATTCTCCTG GCATGAAATC ACTCCTTCTT GTTGTTTTAA TTTGCATTTC
TTCAGTTACC AGCGCAGTTG AGCATCTTTT CATACACTTA CTGACCATTT CTA

## SEO ID NO:2034: (Length of Sequence = 289 Nucleotides)

CCACCAAAGA ACATCACGCT GTCTTATGTC AAATGCTCGA CAATACCTCT CAGTAGGACG TTGTTGCAAG GCTAGCTAAT
TTTAAATCTG GTATGAGTAA TACAGTCAAA CCTAGTTAGT ATGCGAGAAA GTCGTTGCTA ACGCATGGTG AGAGGATGTG
ACGTCACAGC ATGAGCAGTC CCTGGTTGTC CCATTGTCAG ATAAACGTAG TNNAGTAGNT CCAAGTTTCT ATTCCAGGTC
TCTGAACCCC AAAGCCAGGC CTTTCACTTT TGCTGGGTGG CCTGGAAGC

SEQ ID NO:2035: (Length of Sequence = 290 Nucleotides)

CTTTTCCTTC ATCTGAACAC AGAAGGAGCC ACGGTCTGGA AAGTNTGCCT GTCCTTCCCG GGAGTGGGGA GGCCGGTGTG
AGTTTTGATC TTCCAGCTCA GGCAGACACC TTACACAGTG CAAACAAGAG CCGTGTCAAG ATGAGAGGGA AGCGTAGACC
GCAGACCCGT GCAGCTAGGC GGCTGGCTGC TCAGGAGGTCC AGCGAGGCTG AGGACATGAG CGTCCCCAGA GGACCCATTT
GCACANTGGG CTGATGGCGC CATTTCCCCA AATNGCCATC GGCACCAGCT

SEO ID NO:2036: (Length of Sequence = 241 Nucleotides)

TTATTITATA TAAAAAGIGI TICIGIGATI CICCAGAGCC CAGGAGTCAG INCIGGIGGI TGGAGGGACC TGCCCCCACT
GGITCATITA ACCCICTGIC TCGGIGCCCI NAGAACCICA GCCAGAAAGG CAAGGAGGAA ATCAGAGCAN GAGCCICATA
CICITGGIGA TCIATICATI CINIGACCIC AGGGGICACA TATAAGGICA GIGITICICG TCCCCGNCGG ATCIGCACTG
C

SEO ID NO:2037: (Length of Sequence = 270 Nucleotides)

CTATTATTIT GCATTITIGG TAGAAGGGGT GGTCTCACCA TGTCGCCCAG GCCGGTCTCG AACTCCTGAG CTCAAGCGGT
CCACCTGCCT CAGCCTCCCA AAGTGCTGCG ATTACAGGCT TGAGCCACTG CACCCTGCCC AACCTTGACT ACTTCTAATA
GGGATGAGTC GAGTAGCAGT TAGGGGCGTC CTGTGCGGCT GGGTCTGCCT GAGGCTCCCC TCGGCCCCGT CCATGGCTTG
TTGTGCATCT GGCCCTGAGT GCCTTGGCCC

SEQ ID NO: 2038: (Length of Sequence = 151 Nucleotides)

SEO ID NO:2039: (Length of Sequence = 166 Nucleotides)

TITETCIETT ACAACCTCCE TATEACECCA CECCACCCEC TETTCACETC CCGTCGECCT CCTGCACACN CCACACGCTE CECCCEGAAG ECCCCTGCTE TEGAGAAGCC GGACCCATCC CCGAGGTCCC CAGCGAGGAC ACANACTCCA CGAGAGCAGC CCCTCC

SEQ ID NO:2040: (Length of Sequence = 362 Nucleotides)

GAAGIACGGT TAAAATTAGA TITGACCATA TGGAAGATCT TITTACCAGTT GGTCTCCAAG AATGTCTTCC TTATTATGTT
ATTGGTCATT TITGAGCGTG TGTGTTGGTG GGGTGGTTTC TGCCTTATAT TCCTTAACTA CATTGTATAT TTTTGTAAGG
AATTGGGAAT TCATTTTAAT GCTTTTTAAC ATCTTCACTG GGAACTGGAA TAAAGTTATT CTTGACTCTG TACCTTGAGC
CATTGTCAAA GTCAGGGGTT ACATTTTAGG TATCTAAAAA TTACTCTTTA ACTTTCACAT TCCCTGGGTT AGGAAGCTGC
TGTTCAGGAG AAATTTTCCN GGTTCTTCTG GCAATTGGCT TA

SEQ ID NO:2041: (Length of Sequence = 360 Nucleotides)

CCTAATTGTA AGINATGAAG TCGAGGAGGI GCGTGATAAT GGGCCAAGTG AGGATGCAAT GCACCAGGTG TATAAGTAGC TGCAGGTCACT CCAGCTTCAA TTCCCAGTTC CCAGGCAGAC CTCTCTGGAG CCTGTCGAGG ATGINAGGAC ATAGTCTGAG GCACATGAAT ATGATGCCCA TGACCATAGT TTCGGTGCAT CCTATGTGGA TGGGGTGCGG GGCGTTCATG TGCCCGCNTT GGATGCTGCA TCATCCTCCT CCTTTGAACT TCCATCCTCT GCATCACTTC ATGAGGATGC AGTCTCTGIN CTGGAGGTGC TGTGGGCTGGA ATATGGCTG GATGTAGGA

SEO ID NO:2042: (Length of Sequence = 403 Nucleotides)

GITATIGTIG TITGAGATGG AGITTCACTT TINTIGCCCA GGCTGGAGTG CAGTAGCATG ATCICAGCTC ACTGCAACCT CIGCCTCCCG GGCCCAAGAGG ATTCTCCTCC CTCAGCCTCC TGAATAGCTG GGACTACAGG TGCCCAACAG CACACCCGGC CAATTGTTGT ATTTCTAGTA GAGATGGGGC TTCTTCACGT TGGCCAGGCT GGTCTCGAAC TCCTGACCCC AGGCGATTCC CCCACCTCAG CCTCCAAAAG CGCTAGGACC ACAGGCGTGA ACCACTGCGC CCAGTCGGAA GTAATAGTTA TTAACCAATG TGATGGCCGG GTGTAGGGAC CCTCGCCTGT AATCCCAGCA CTTTGGGAGG CCAAGGAGGG AGGACCGCCC GAGACCAAGA GTT

# SEQ ID NO:2043: (Length of Sequence = 331 Nucleotides)

CCCCTTACCE TETEGETETE AGEAGCETCA CCACAGGCAC CGCAGCTTTC CCGCTGTGCA CCCAGGTGGG TGTGTGAATC CCCCTGGACT GCGCCCAGGC CACCTTCATC TCCCATGACA AGATGGTCAT CTCCCTCAAG GGCAGTCAGA TCTACATGCT GACCCTCATC ACCGATGGCA TGCGTAGGTT CCGAGTGTTC CACTTTTGAC AAGGCGGCCA CCAGCGTCCT CACCACCAGC ATGGTCACCA TGGAGCCTGG GTACCTGTTC CTGAGTTCTT GCCTGGGCAA NTCTCTCCTC CTCAAGTACA CCGAGAAGCT TCAGGAGCCC C

### SEQ ID NO:2044: (Length of Sequence = 244 Nucleotides)

ATGGAAGATA CTAAGAGCCT CAGTCTGGAA GCATTTACCT AGGAAGCGCA TATAGACAGA GAAGATCAAG GACTGAGGCC TGAGACAGTC AGCACTTAAA GGGTGAGGGG AGAAGTGCCA AGGAGACAAG GTGAGAACAG CAGAAGAGTA GCCAAGGCCC AGGATGTTGC CACAGAAGCC AGGAGAGGTG AGCATGAAAA CAGAGGAGGA CCAGCTGCTG GGACAGAAGA GCCATATGGA AGAG

## SEQ ID NO:2045: (Length of Sequence = 333 Nucleotides)

GTCAGGGATT TGTCCATTCT GCTCTTGGCC TCTCCTGAGG CCTCATAATG GGAGACCAAA TCAAAAATGT CCCATGTCAC
TTGAGTGGGT ACACTGCCTA CAGAACCTTG AGGTTGACTC CTGCTTCAGT TCTCAGCTGT TTACCACAGC CCTCCAGGGT
CCAAAGATTG AGGAGCTTTC TCTTTCCTGG GAGGAACTGT CTCANATTTA GCTTGTGTGT GTTTTGGACA GAGGCTCCAC
AGCGGTGGCT CTTGAGGAAT CCTCACCAGT TTGTNCTCTT CCCTCTGACA AGCAGCACCT GAGCAGATGC TGAGGCAGTT
CATTAAACCA GGG

## SEQ ID NO:2046: (Length of Sequence = 274 Nucleotides)

GCAGGITTAT GITTITATIT ATGIATITNA ACTGACTIAT TIGIGIATCC CACTAGAACA ATACATICAC AATATACITG CAGAACTGG CCTGGAGCA CATGGGAGCA GAGAACTTGT CCAGTGAATA GTTGTTGAAG AAAGGAGTAA AATCTCCCCC AAACCCTAAA GGCATCCTTT TOGTAGTGG TGTCCCATAG GTATGGCTGC TGAGCACCAG GGCTGCTCAC CATGCTCCCA AGAAGCAGAG TCAGGGAGCA AGACAGCAGG GTTT

# SEQ ID NO:2047: (Length of Sequence = 327 Nucleotides)

GECCECCECA ACCTEAAATC AGASCASCCE TCCGTGGCC TCAGGAACCT TGCTGAGCTT CGCCGATCTT TCATTGTTGC .

TCCTCTTT

TTCTTCTGCA TCCCTCTTC TAAAGGCAGA CCCGCGGCCA CCCGCGGCCC TCAGGAACCT TGCTGAGCTT CGCCGATCTT TCATTGTTGC .

TTCATTT

SEQ ID NO:2048: (Length of Sequence = 241 Nucleotides)

ACTITICITICI TOTGATTITA GGACTOTGC TEGCCATGIG CITNNEGTIG COTOTCCTCC ATTITNCCACT GGATTINCAC
TECATOGITT GGAGATACAA AGOGAGCAGT TOTTGGTCAG AACCOTCCTC TECTTITCAT TETETITGAT AATGGTTACT
GGGTCCTTCT CTCAAGGGTA GCAAGGCCAA GCTGATGGCT GCTTGTTTAG GAGGCCATCA GTTCCTTCCT GTGGAGAAGG
G

# SEQ ID NO:2049: (Length of Sequence = 269 Nucleotides)

ATTITIAGIA GAGACAGGI TICACCATGI TGGCCAGGCI GGICTCAAAC TCCTGGCCTC AAGTGAGCCA CCTGCTITGG CCTCCCAAAG TGITGAGATT ACAGGIGAGA TATTCTATAT TCATGGATTG AAAGACTCAA TATTGITAAG ATGTCAGINC TITCTAAAGN GATTITITAG ATGCAACACA ATTCCAATCA AAATCCCAGG NITITITITGI AGCTATCAAT TGATAGATAT CAACAGCCAG CTGATTCTCA AATTTACGI

#### SEQ ID NO:2050: (Length of Sequence = 170 Nucleotides)

TTTTGAAGAG AACGTCAGTT TAATAAAGCT AAATGGGGAG AATTGAAGTT TGCATTTGAC ATGGTATTAA ACAAAACCAA AGGGCTGAAA CTCATGTTTA GACAACACAG GTCACTAGTC ACTAGGCAAA GAAAACAGTC CACAGCAGGT GGCACAAATA ATTCCTATAC

# SEQ ID NO:2051: (Length of Sequence = 262 Nucleotides)

CAGGGCACAC GCAGGACCAC TGTGGATTAG AAACCCACAC GTGTCACTCG CAACATTCCT CCCACATCCA CATCCACGAC
GGAGCCAAAT CTCATTTGTC ACCCTCAGTC ACCACCCCAC AAGATGGAGC CGCTGGTTAC GACATGGATG ACAGGTGTCA
TGCACAGGGA GAGAATTTNT CCCCGGATAC CCCTGAGGAC CAAGGACCAC CCCCAGGCTA GGGTGGGAGG ATTGAGAGCA
GTGCAAGAAA CCAAGGAGGA IN

## SEO ID NO:2052: (Length of Sequence = 325 Nucleotides)

GAAAAAAGAT TGTTTTGTTA GAAAAAGCAA AAACAAAAAA GCATTAGAAA GTGGGAGCCA CTGCACAGCA GTAGCCTAGA
GACTGGCTGC GATATGGTAG CTCTGCCTTG ATATCATCTT CGTGTCTTCA GGCATAGAGA AATGGCAGAG GAGCAGTAAG
ACCCCACAGG AGATGGCCAG AGGNTCCACC ATCAGCCTTC TGGGGACTGA GGAGGTGATC TTAGTGGAAT TATTTTATAC
TCACCTCCCC CGGGGTTTAG TCCTTCCTCC AAACACTTAG TTCCAGGGG CAGGAGACCT GTTACTAGCA CTGTATGTTT
CTTTG

## SEQ ID NO:2053: (Length of Sequence = 222 Nucleotides)

TITCAAAATT AGICTIAAGA GIATAAGCIG TITTINAGGG CIGTAGCCAG ACTACATAAT GAGCGGTGAA AGCGGCTGCC
TICCCCTCTC CIGACACCAG CAAGGGGGAG GCACCATCAC CGGCCCTGCC CCATCATGCA TCCAATGATT ACTAGCACTA
GANGCCAACG GCAAAGGNCC CCGCGCGCTT GCTCGTGTTT AATCCAGGTT AAGCTATACA CG

#### SEO ID NO: 2054: (Length of Sequence = 341 Nucleotides)

GTARATTRAG ARTRIGECCE CAGAGTITTE TITRICTEGG GTCTGAGCAT AGATTITATA TICTCTGTTG CGTTTTTTAA ATCTRACTTT CTGTCTCCAA TGGAGAGAGA ACAGGGAGGA TACAGAAGTA TTGCAGCCCA GATCCCCTAT CAGGGGGACA GCTGGTGGGC AAAGCAGCCA CCCCACAGCC TTGTGGCTAG AGTACAGTGG GGTGGACCCT CCAGCCCCAA TAGCCCTAGT ACCCAGCTGG CAGGGTTGCC CACCCCTGCT GTCCACCTGC TCCATCCTCT AGGGGTTCCA CAGGCCCCTG ACCGCACAGG GAGGCTGGGG CCAGCCTGGT C

SEQ ID NO:2055: (Length of Sequence = 258 Nucleotides)

CIGCCTCAGC CICCCAAGIA GCTGGCATIA CAGGCGCCCA CCACCACACC TGGCTAATIT TIGITATITIT AGIAGAGACG AGGITTCACT ATGITGGCCA GGCTGGCTIT GAATITCIGA CCTTGTGATC CGCCTGCCTC GGCCTCCCAA AGIGTTGGGG ATTACAGGGG TGAGCACCAC GCCCGGCCAA CTTGCTTTTC TCTAATGGCT GGCGATGTTA ATTTTTTCAC TGGCTTATTT ACCGTCTCCT TCTGTGGA

#### SEO ID NO:2056: (Length of Sequence = 292 Nucleotides)

CTCTTGACTC CGAAGGCTGG TGACAGACAC ATAAGGCAGC TCAAACTCTT GCAACTTCCG TACAAAAGAA AAGGCTCCAT
CCTCTTTTTC TCGAACTAAG AATAGACTAA AGTATCCAAT CAAGTCATCT GGAAGATCCA GCTTTGCAGC TACAGCCTCC
AGGACATCCT CAGTCTGATC TGAAGTTAGC ACGTTGACCA GAACTTTCTG CCCGTTGCTG AGCAGCACTT CCAAGGACAC
TTCCTCTGTG GGGACCTGCT GTGTCTCCTG TTGTGCCCGA CGCAGGAAAC TG

#### SEO ID NO:2057: (Length of Sequence = 293 Nucleotides)

CCAAAAAACT TGGGIGCCTG AAGGIGGGGT TTTGATCATG GCCAGGCTTC AAATTTAGGT CAGGCTCTGG TGGTACATCC
TTATATGCTT GGIGCTCAGC ACAGGICAAG ACACACAATA GACCCTCAAT AAATATTTGC TGAATTTGAA CAATTCCTGT
AAAAATCTCA TTAAGAGACA TCAGCTTGGG ACACAGTTCC TCTCTTACTG TTCCTTCTCC CAGAAGCTCC TGGAATGAGC
AGGTCTGGCG GCAGGGGGCA CACAGGGCTG CTGCTCAAAT CGGAGAATGG CAC

#### SEO ID NO:2058: (Length of Sequence = 172 Nucleotides)

CTTCTACAGT CAAGGAGCTC AAGCTCGCCG GGCGACCCTG CTCCTGCCTC CCACATTAAT GGCGGCATCC TCOGAGGATG ATATAGACCG GCGGCCCATC CGGAGAGTGC GCTCCAAGAG CGACANGCCG TACCTCGCAG AGGCCAGGTT CTCCTTTAAC CTGGGGGCAG CT

### SEO ID NO:2059: (Length of Sequence = 245 Nucleotides)

GCAAGANGGC CGAGGGGGCC CAGAACCAGG GCAAGAAGGC CGAGGGTGCT CAGAACCAGG GCAAAAAAGT AGAAGGGCCC CAGAACCAGG GCAAGAAGGC CGAGGAGCAGG GCAAAAAAGG CGAGAACCAGG GCAAAAAAGGC CGAGGGGAGCC CAGAACCAGG GCCAAAAAAGG AGAGGGGAGCC CAGAATCAGG GTAAAAAAGA AGAAGGGGCT CAGGGCAAAA AGGCA

#### SEO ID NO:2060: (Length of Sequence = 318 Nucleotides)

ATGCCCTGIT AAGGAGCTTG GGCTTGATCC TCTAGGCAGG GAGCCGTTGG AGGATTTAAG CCAGGGAGTG CTGCGGTTGG
TCACACTCGC CATTTATGTA GATCGTTTTG GCAGCCAGGG GAAGGATGGA TTTNAGGGGG ATGAGATTAG AAAGCTGGGA
TATGAGTTAG GAGGCTGAAA GATGGTTGAT AAAAATNATC GTTGGCAGC CGAGATAACT GACTTCAAGG ACATATACTG
GACTTATAGC AGAGCCTGIT GAGTCTTGCT TTTGCACACA GTTCAAATAA TCACTTAGTC ATGTGGTTTA TCTTGCCA

#### SEQ ID NO:2061: (Length of Sequence = 331 Nucleotides)

AAAAATAAAA ATCTATAAAC TACGGATCAT AAGCAACTCC TGTTTCTGTG GGTTTCACCA CATTCTCCAG AAACTGAACT
TTTGCTCATA AAAATTACAT AGAATGTAAA CTAATTCATT TTTTAAAGTA AATGCAAAAC TAAGGGTTAC ACAAGCACTG
AGCATCAACA CTGACAGAAT ATTAATTCTG AAGCCCATTA ACTTTGACAA ACGTTTATTC ATCTTTGCCT TCTTGAAGCG
TGTGACTATC CCAGTTTTAC AGGAAAAGCT TAAACAGAAA AAGTTAAATA ATAATCTCAA GGTTAGNAAA CTAAGACATA
ATTTCTAGCT C

SEQ ID NO: 2062: (Length of Sequence = 316 Nucleotides)

CTAAAATCAA CCACATAATT GGACATAAAA GAATCITCAG CAAATACAAA AGAACCAAAA TCATAACAAA CACACTCTAG GGCCACTGCA CAATAAAAAT ACAAGTCAAG ACTAAGAAGA TCACTCAAAA CAATGCAATT ACATGGAAAT TAAGCAACAT ACTCTCAAAA TGACTTTTGG GTAAATAATA AAATTAAGGC AGAAATAAAG AAGCTCTTTG AAACTAATGA GAAGAAAGAT ACAACGTATC AGAAACTCTG GGGTACAGCT AAGGCAGTGA TAAGAGGAAA ATTCTTAGCA CTAAATGCTC ACATTG

#### SEO ID NO: 2063: (Length of Sequence = 312 Nucleotides)

ATCCATGGCT TTAGCAAGAT CCCAGTGTCG GAACTCTCCT AGCAACTTGT MITCATCCAG TGATACTGGT TCINTGGGGG GCACTTACAG GCAGAAGTCC ATGCCCGAAG TGTTGGAGTG AGCCGTAGAT CCCCAGCCTC CACTGACAG CAGAACACCC AGTCAGATAT TGGTGGCAGC GGAAAATCCA CGCCTAGCTG GCAAAGAAGT GAGGATAGCA TTGCTGACCA GATGGCTTAC AGTTATAGAG GACCTCAGGA TTTCAATTCT TTTGTCCTCG AGCAGCATGA ATATACAGAG CCAACATGCC AT

# SEO ID NO:2064: (Length of Sequence = 294 Nucleotides)

TACCTAAAGA ATCCTCAGAT GGGAGACCCA GCCAGTTTGG NTCACAAATT AGCAGAAGTC AGCCAAAATA TAGAGAAACT GCGAGTAGAG ACCCAGAAAT TTGAGGCCTG GCTGGCTGAG GTTGAAGGCC GGCTCCCAGC ACGCAGCGAG CAGGCCGCC GGCAGAGCCG ACTGTACGAC AGCCAGAACC CACCCACAGT CAACAACTNC GNCCAGGACC GTGAGAGCCC AGATGGCAGT TACACAGAGG AGCAGAGTCA GGAGAGTNAG ATGAAGGTGC TGGCCACGGA TTTT

## SEO ID NO:2065: (Length of Sequence = 331 Nucleotides)

GAGCTGAGIT TCACCGTGTT GCCCAGGCTG GTCTCGAACT CCCGGTCTCA AGTGATCCTC CTACCTCAGC CTCCCAAAGC
ACTGGGATTA CAGGTGTAAA TCACTGTGCC CAACCTGCTC AAACTCTTGG AGAGAAGCAA GTCTTCTAGC TGAACGTGAT
AATGGCCTCA AAAGCAGTGT TGACAGCAGA TAATCTTCAC ACAGACAAAT GTCTACAGTT TCTAAATAAG CCAACTGTGC
ATATGGCCTA CAGGCTCTTC AGCATAACCT ACCCAAAGCT CAGGTTCCCT GAAGGCCAGG ACAGTACCTC GGGCCTTCAA
GCAGCATTTG G

### SEO ID NO: 2066: (Length of Sequence = 321 Nucleotides)

GTCTTGANCT CCTGACCTCA GGTGATCCAC CANCCTCGGC CTCCCAAAGT GCTGGGATTA CAGGCGTGAG CAACCGCACC
TGGCCTTGAA CCCTTTGAAG TATTGATGCA AAAACAAGTG GTCAGCTATG GCCAAATTCG CAATTCAAAA AGATCCAAGA
AAGCAAGTTG AACATCCTGA TTGGAGATGG GACACACCCA AACGTGTGTC TTGAGGTGGC TGCAAAGTCC TCCGGTCTGA
GCCAGINTAA GCAGGTTTTA CCCCAGCCCA TGATTTAGAG AGATGTTNAG TGCAGATCCT GAGCTCAGCA GAGAGCAACA
T

### SEQ ID NO: 2067: (Length of Sequence = 335 Nucleotides)

CTGGCTCTGT GGCTCAGGCT GGAATGCAGT GGGCCGAGGT TGGCTCACTG CAACCTCCAC CTCCTGATCT CAAGNCGTCC TCCCACCTCA GCCTCTCAAG TAGCTGGAAC TACAGTGGAA CTACAGTGG ACAACATCAC ACCCAGCTAA TTTTTININAT TTTTTTGTAGA GACGGGGTT CACCCTGTTG CCCAGGCTGG TCTCAAACTC CTGAGCTCAA GCAATCTGCC CACCTAAGCC TCTCAAAGTG CTGGCATTAC AGGCATGAGC CACCGTGCCT GGCCTGGGAA GCTCTTTTAA CAGAGGTGAT GTAAAGTAGA AAAAGCAGTG GGCTC

# SEO ID NO: 2068: (Length of Sequence = 274 Nucleotides)

CCAACCGAAT GGACAGGGTA AAGAAGGAAT GGGAAGAGGC AGAGCTTCAA GCTAAGAACC TCCCCAAAGC AGAGAGGCAG ACTCTGATTC AGCACTTCCA AGCCATGGTT AAAGCTTTAG AGAAGGAAGC AGCCAGTGAG AAGCAGCAGC TNGTGGAGAC CCACCIGGCC CGAGTGGAAG CTATGCTGAA TGACCGCCGT CGGATGGCTC TNGAGAACTA CCTGGCTGCC TTGCANTATG ACCCGCCACG GGCTNATCGN ATTCINCAGG GCTT

SEQ ID NO:2069: (Length of Sequence = 321 Nucleotides)

GIGCCATCIG TITACITCIC AAATGAAAAA GAATTCAGGT CIGAGIGICC AGGAAAGGGG GIGAATITCA TAACCGCCIG
TGACAGCGAT GGGAAGGAGC CACACCCCTC CAGAGGGTAC CACCCAGCGG ACAAGIGGGG AGGAGGAAGT AGCTGGCATG
AAGCCGGCCC ACCCAACCTC CGGGAGAGAG GAAAAGGAGA ACACGGGATG AGGAGGCITT AAATAGIATT TCATAAAATA
AAAATGCCCA GCACTCTTAG GAACCICCA TICAACCGCC TAGITITIGI TIAAATAATT CIAATGCCAG AGCIGGGGGG
C

SEQ ID NO:2070: (Length of Sequence = 161 Nucleotides)

AAAGCIGCAT AAAACAAGIT TAATTICCAA CCAGGGICAC AGICATOGOG TIATCCCACA TITTGAGCAA GGATAGAGAA GGIGAGITAT TAAACATATA CAGICTACAT TCCAGAGGAG GAACTGCAGT TACCACTATA ACACCACAGA CAAACTITTGG G

SEO ID NO:2071: (Length of Sequence = 288 Nucleotides)

GIGGAAGGC CITCATACAT GCITCCCATC TICAGGAACA TCAGAGAATT CATACIGGG AGAAACCATT CAAATGIGAT ACATGIGGIA AGAACITCCG TCGIAGATCA GCACITAATA ATCATIGCAT GGICCACACA GGAGAGAAAC CATACAAATG TGAGGICTG GGIAAGIGIT TCACITGIAG CICAAACCIT CGIATCCATC AAAGGGICCA CACAGGAGAG AAACCITACA AGIGIGAAGA ATGIGGIAAG TGCITTATTC AGCCITCACA ATITCAGG

SEO ID NO:2072: (Length of Sequence = 284 Nucleotides)

TCTTGTCTTC AGACCCCTTT GCCGTATTGT CCCTCCTAAC TGGGACCTAA GCTAAGACTC AAGGGCTGCT CCCATGCCCT
TCAGTATCCC CCATAAAATC TAACTACACA TTAGAAACTC AAAGAATAGC ATAGGCATGA TCCATCACCT GCAACAGAAG
CAGTGAGGAG ACTTAAGCCA GGGTTCCTMC AAGMGATINC ACCGACCNTT CCTGCATCTC TGNATGCCGG ACTCCTAAGC
ATTTTACTCAG ATTTTAAACA GCACATAATG CCATGGCGAG GATG

SEQ ID NO:2073: (Length of Sequence = 270 Nucleotides)

. GEAGCGATAC GCCCCTGTCG CGAAGGACCT GGCGTCTAGA GATGTGGTGT CTCGGTCCAT GACTCTGGAG ATCCGAGAAG
GAAGAGGCTG TGGCCCTGAG AAAGATCACG TCTACCTGCA GCTGCACCAC CTACCTCCAG AGCAGCTGGC CACGGCCCTG
CCTGGCATTT NANAGACAGC CATGATCTTC GCTGGCGTGG ACGTCACGAA GGAGCCGATC CCTGTCCTCC CCACCGTGCA
TTATAACATG GGCGCGCATTC CCACCAACTA

SEQ ID NO:2074: (Length of Sequence = 278 Nucleotides)

GCACATGCCA TCAGTCCTGG CTAATTTTG TATTTTAGT AGAGACGGG TTTCGCCATG TTGGCCAGGC TGGTCTCGAT CTCCTGACCT CAGCTGATCT GCCCACCTCG GCCTCCCAAA GTGCTGCGAT TATAGACAGG AGCCACCGNC CCCGACCCTC TCTCACTTCT CAAATCTCTT TCCTTTTTCC ACCTTCTAGG TGTCAAAGAC AGTGGATGGT CTCTGAGGTT CAAAACCAAG CTGACCGGGT AAGTATTTAC AGCAAAGCAT CCAATGGG

SEQ ID NO:2075: (Length of Sequence = 232 Nucleotides)

GICICIAGGA ITCACTCAAA CCCAGGATCA CGGITTIGIA ATGITATCAA GGCATGATIT TGGATTICAG AGCTGGCCCA GIGAACAACA AGCAATCAAG CATTCCITTC TCTTTCTITC TCTCTCTCAC ATATACACAC ACACTCTTTC TCTCTCACGT

TACTITCACT GICACTITCT CICTACTGGA TAACAGGCCA AAAGTACTGG CACTCATCTT TCACTITCTT CC

SEO ID NO:2076: (Length of Sequence = 223 Nucleotides)

GICACGAGGT CAGGAGATCA AGACCATCCT GGCTAACACA GTGAAACCTC ATCTCTGATC TATTCAGGGC TCINACTTCT TCCTGGTTTA GICTIGGGG GGIGIATGIG TCCAGAAATG TATTGATTTC TTCTAGATTT CTAGTTTATT TGNGTAGAGG TGTTTATTCT CIGATGGTAG TTTTGTATTTC TATGGGATCA ACGGIGATAT GCTCTTTATC ATT

SEQ ID NO:2077: (Length of Sequence = 323 Nucleotides)

GTCCCCCTTC CCCTCTTGTG AGACCAGGCT CTGTCTCAGG AACAGGCCTG AGGGAGGAGG AGCCACGTTC CTCCTTCCTT
GGAGCCCTGA GGTGGCCAGG CTGTCCCCAC ATAAAAGCATG ACATCCAGGT GCCAGCTGGC TAAGAAATGG AGCCTGAGGC
TGCAGCTCAC CACCTGTACC TCACAGATGT CCATTCAGAG GAAAGAAGGG TGCTCCAAAAC GCCAGGCCCC CAAGGAGCAC
AGACTCAGGG TCCAGGCAGG TTCAGTGCTA GTAGGCAGGT GGGCACTGCT GTCCAGGAAA ACCTGGTGGG CAGCTGTTTT
CCC

SEQ ID NO:2078: (Length of Sequence = 310 Nucleotides)

AATTIGCAGI TGITAAATCA AACCTACIGA CATTIATAGI CCCTIACTIT CICTICTITC TICCATIGIA AATGICTGAA
AIGICGIACA GICATACTIC CCACIGIATI TITIAGGITTI ACTCICATAC TICAATAATC ACTACCACCC TITIATITCAA
TAAAAGITTI AAGICAGIGC TGATITTITIG GIAGCICCCA TITICIGATA TATITGICAT GIACATATGC AAGIGTATGI
AATGIAGGIG TGCATCTATA TATACCCACA TATACATATA TACATATACA TATATATGIC CATATACACG

SEQ ID NO:2079: (Length of Sequence = 281 Nucleotides)

GAGACCIGCC AGAAGATIAA AAAAAAGAAT GAGAGAAAAG CCCAGITAGI GGIGIGCAAA CITACITCCI TIAAATGICC CATGGATGIA GGACAGTGCC ATGITTCAAG ATGCCIGIGA GCTAGGICIT CAAGATTIAT AGAATGITAC TIATGAACAA AATATAATTA TITATGGIAC AATTCTTGIA CITTAGCAAA TCTGGAGITA GITCATAGIC AAAGTCAGIT AATATTTCTT AGAGGAAAGT TTTGGCTTTT TGTGGCAACA TTTTTATAGC T

SEQ ID NO:2080: (Length of Sequence = 311 Nucleotides)

ATTAAAAAGA ATATTATTTA TTATCINCTT TATTAATACT CACATGTAAC CTTTGCTTTT TACACAAAAG TCTGCTTTAG
AAGAATGCCT CCNCGGCTTA TCATGCCCAA TGGGGCTTTT TGTTTCTGGA CCACTTCCCC TTTCTCCACC CCCACCCCCA
CATCCAAATT ACTCTTAACA TGTTCACAGA TACCACGNAT ATTTTGTAAA CAAGNTTTGG GTTACTGGAA CTTGATTTCA
TTAACATCCC ACTTCAAAAT GGAAGGCAGG TGGAGGGCAG GGTAAGGNAA TAGGGGGAAA GAGGGCAAGA G

SEO ID NO: 2081: (Length of Sequence = 207 Nucleotides)

GGACGCACGC TCGCTGCCAT CACCGCTGGG TGGTTTTTC CCCCTAACTT TTTACTTAGC CTTTTTGGTT TGINTCCCCA CCCCCACCTC CTCACCCCCT TTCCAGTTCT TCTTCAGGCC CCTCCCAGAC GCACCCCAGC GGCCCCTGCA GCCCCTGCCT CCAGCCTCCA GCCTCACCTT TGTGCCCAGA CTCGCATTTG GAAGACT

SEO ID NO: 2082: (Length of Sequence = 260 Nucleotides)

TTAAAAGAA GIGCATACIT ATTIGCAAGG AAAACAAATG GAATAGACAA AAATTITAGA ATATAAAGAC TTITTINCAT
TTATGIATGI GITIACAATT CAAAATAATA AAGCTAGITA AAAGICAATA CATATTAGAT ATATTCAAAT ATTITINCCAA
ATAAATTICG ATCTTATCAG TTAACACCCA TAGCAAAAGA CTAAGGAGTA TITGIATAAC ATTAGGGTAT TTGACCTCAT
ATTCTATTCA TITGGGTTTA

SEO ID NO:2083: (Length of Sequence = 257 Nucleotides)

AGITTCATAT GITTATIANA CCAAGCATGA GGCCCITCIG TGCACAGGGC CCTGIGIGAC GGCATGGGAG GCGIGCTCAT
GAGGCTGGGC GIGCCCGCCA GAGACCITIC TAAAATGCAG ATTCACGACT CTCCTCCTCA AGCCACCCIA GTGGCCAGTG
GGGTCATTTC GGATCAGAGA TTCCTGGAAT AGATCIAACT AAGATGGTAG ATATTATTIT AAATAATGCC TTTTTINAGGA
ACTAGCTGCT AGGCTCT

SEQ ID NO:2084: (Length of Sequence = 255 Nucleotides)

TATHATACAG CATHGICAAG ATTATHTGAC AAAAGGCAGT AACAAGCCGA AGGAAAACAC ATTHACAAGA AGCTGAACAA CTIGTATCAG AACATACATC AAGGTGAAGA GTITCGGCCC TCTTGGTATA GGGTATGTAT GTGTACATCT CCAATTHTGA ACAATGATGA CATAAGGCCT AATACTCTAT THATTCAGGN GACCCCATAA TCAGGGATAAT AGTAGGCATT CAGAGTAATA AAGTGATCAC AGTTG

SEO ID NO:2085: (Length of Sequence = 290 Nucleotides)

GGACGCACGC TCGCTGCCAT CACCGCTGGG TGGTTTTTTC CCCCTAACTT TTTACTTAGC CTTTTTGGTT TGTGTCCCCA CCCCCACCTC CTCACCCCCT TTCCAGTTCT TCTTCAGGCC CCTCCCAGAC GCACCCCAGC GGCCCTGCA GCCCTGCCT CCAGCCTCCA GCCTCACCTT TGTGCCCAGA CTCGCATTTG GAAGACTCCA CCTCCCGCCC AGGCCTGGGC TGTTGGGCGG TTGGAGATTC AGGTTTTAAT CCACACAAGC CCCAGTGAGG GGTGAAGCAT

SEO ID NO:2086: (Length of Sequence = 342 Nucleotides)

AGITICATAT GITTATTAAA CCAAGCATGA GGCCCTTCTG TGCACAGGGC CCTGTGTGAC GGCATGGGAG GGGTGCTCAT
GAGGCTGGGC GTGCCCGCCA GAGACCTTTC TAAAATGCAG ATTCACGACT CTCCTCCTCA AGCCACCCTA GTGGCCAGTG
GGGTCATTTC GGATCAGAGA TTCCTGGAAT AGATCTAACT AAGATGGTAG ATATTATTTT AAATAATGCC TTTTTGAGGA
ACTAGCTGCT AGGCTCTCTA TCCTGGGAGA AGAAGGTGAA GGTTCCGCAA TATCAATTTT CCCAACTCAG CCAAGATTTT
CCCAGCCATCT NCAGGACAAG TG

SEQ ID NO:2087: (Length of Sequence = 306 Nucleotides)

TATTATACAG CATTGTCAAG ATTATTTGAC AAAAGGCAGT AACAAGCCGA AGAAAACACA TITTACAAGAA GCTGAACAAC
TIGTATCAGA ACATACATCA AGGTGAAGAG TITTCGGCCCT CITGGTATAG GGTATGTATG TIGTACATCTC CAATTTTGAA
CAATGATGAC ATAAGGACTA ATACTCTATT TATTCAGGAG ACCCCATAAT CAGGATAATA GTAGGCATTC AGAGTAATAA
AGTGATCACA GTTGAATGAA CGTGTTCACC AAAAGTCTTA GACCAACCTG ATATCATCTT ACACTT

SEO ID NO:2088: (Length of Sequence = 326 Nucleotides)

ATTERATARC THRESCRATC TICCACTITIC ACTIGARATER THRAGATCRS THIRCOGRAM GICATTICAT CCHISCOTIG CAGGCATCIG GCTATICTIG GIGCAGGGCT GATGGGAGACA GCCACGAGGGC AAGICTCCGT GGATAAGGGG CTAAAGACTA TACTIAAAGA TGCCACCCTC ACTGCGCTAG ACCGAGGACA GCAACAAGIG TICAAAGGGT AAGCCTGCTC TCTCTCTTTG CAAGAGTTAG AATGTCCTIT GITTCTTGGT TAGTTGTTIT TIGTGGTGGC TTGGTGGGTT TTTTTGTTTGTTCTTG CCATCA

SEQ ID NO:2089: (Length of Sequence = 291 Nucleotides)

GGGTTTCCCT TTCCACTCAT CGGAGATTCA GAGGGATGAG CTGGCACCAG CTGGGACAGG GGTGTCCCGT GAGGCTGTAT CGGCTGCT GATCATGGGA GCGGCGGGAG GCTCCCTCAT CGTCCTCTCC ATGCTGCTCC TGCGCAGGAA GAAGCCCTAC

GGGGCTATCA GCCATGGCGT GGTGGAGGTG GACCCCATGC TGACCCTGGA GGAGCAGCAG CTCCGCGAAC TNCAGCGGCA CGGCTATGAG AACCCCACTT ACCGCTTCCT GGAGGAACGA CCCTGACCCG G

SEO ID NO:2090: (Length of Sequence = 293 Nucleotides)

TTATGTGGAA TACCACAGG CCIGGTACAT GGCTGAACTC TTCCCCTTCA TCCTGCTTGG GGTCTTCGGG GGCTTGTGGG
GAACCCTCTT CATCCGCTGC AACATCGCCT GGTGCAGGAG GCGCAAGACC ACCAGGCTGG GGAAGTACCC GGTGCTGGAG
GTCATTGTGG TGACTGCCAT CACTGCCATC ATTGCCTACC CCAATCCCTA CACACGCCAG AGCACCAGCG AGCTCATTTC
TGAGCTGTTC AATGACTGTG GAGCCCTTGA GTCTTCCCAG CTCTGTGACT ACA

SEO ID NO:2091: (Length of Sequence = 274 Nucleotides)

CTTTIGGAAT GGICAAACAA TITIAAGICAA ATGITITIAAT GGIGCAATTA AAATAAGGGI TCAAACAIGI TITCAATATA
TTAATINCIT TAAAGICATG TICAGGCAAG GIGCIGITTA AAAAACCACT ATTAGCTITG TCCACACAIG TAAGITATCA
AAAGITACCA AGGIAATITT GACGITGAAT GCAGCITTAA ACAATAAAAA AATGGIATTA GGITTACITC TCGAAGCAAA
GAGAGCCCCC AACCITGTAA ACTAAACATT CIGA

SEO ID NO:2092: (Length of Sequence = 290 Nucleotides)

GETACETAGE ACECTEGECC TETECTECES COGENICTES TCAGACACAA TCATEGTCTC CACCACGAGE TETECAATEC
CTGGNAGGET GETTTECTEC AGGTCCAGGA GGGCAGATCC ATGGGCGATG GTCCTCCTGA GCTCCAGAAG GCTACGGAAG
GAGAGGGAGG CAACATGGGG CTTCCCCCAG CGCTCCGTCT CCTCCTCCAC GTCCTCCTCA AACTTGATCC AGCGGGCCGT
CTCCCGCCAG TGGGGCTCCT GGCTGCGGTC CAGCATCAGC TCGTTCAGCT

SEO ID NO:2093: (Length of Sequence = 323 Nucleotides)

AGCTACACTE ATACAAGTEG ACCTAAAGAA ACGAGTTCCG CTACTCCGG ACGAGACTCC AAAACCATCC AAAAGGGATC
AGAAAGTGGG CGTGGGAGGC AGAAATCTCC TGCACAGAGT GACAGCACAA CACAGAGAAG AACTGTAGGC AAAAAACAAC
CCAAAAAAGGC TGAGAAGGCA GCTGCTGAAG AGCCTCGTGG AGGCCTGAAG ATAGAAAGTG AAACCCCTGT AGACTTGGCT
AGCAGCATGC CCTCCAGCAG ACACAAAGCA GCCACCAAAG GCTCAAGGAA ACCCAATATA AAGAAGGAGT CTAAGTCTTC
CCC

SEO ID NO:2094: (Length of Sequence = 255 Nucleotides)

AAGGATGITT TGGITCCCTG CCTCAAGGCC GGCCATGIGG GAGTIGIATC TGIGGAGTIC ATTGCCCCAG CCTTGGAGGG
AACGITATACT TCCCATTGGC GICTITCTCA CAAAGGCCAG CAATTIGGGC CTCGGGTCTG GIGCAGTATC ATAGTAGATC
CTTTCCCCTC CGAAGAGAGC CCTGATAACA TTGAAAAGGG CATGATCAGC TCAAGCAAAA CTGATGATCT CACCTGCCAG
CAAGAGGAAA CTTTT

SEQ ID NO:2095: (Length of Sequence = 305 Nucleotides)

GCACTCCAGC CTGGGCAACA AGAGCGAAAC TCCATCTCAA AAAAACAAAG AAAGAAACTN CTGAAGTCGG GGGCTGCTAG
AGGATTTTCA GGAAGGGTCA ACACAGGCCT CACTTCCAGT CCCTCATTTC CCAGCTCACA GAGTCACCAG AGGGTGAGAA
GCAGAACGTG CCAGCAAAGA GGGAAAAGGC CACAGAACCA CCTTNTCCTC AATTACAAAG GGGTGCATTT CAGAGGAGGG
AATAGGGATG GAGAGGAGGA GAAGACCTGC CCAGGAGCCA GATAAATTCA AAGTCACCAA GATGG

SEQ ID NO:2096: (Length of Sequence = 327 Nucleotides)

CTAGATATAA CTACCCITCT CTATTCCICA CCTAAATCCT TATACTGCTG ATGACTITGG AAAATAGTAC AGGGTITTAC
AGTCTAATCA TGACAATACA TCTCCAGGNT CCTTGAGCCA AATACATTCC TCAGAATACT TTTTTTAAAA AACTGAAATT
GATTACTTGT ACTTTGTCAT CACCAAAAAT ATCTGTAGCA AGACATACTG TTCTCAGCAT CCACTTCTAC CATCCTCACT
ATTGTAACTC ACAGTAGACT ATGCCTCCTA CTTTACTGAA AAGATACAAA CCATTACCTA GCAATCATTC TTCCACCTTA
AACATAT

### SEQ ID NO:2097: (Length of Sequence = 296 Nucleotides)

CACCCIGCIG AGGICAATIT CGICACIGAT GCCTCGGGIC ACATAGGCCC TGATGACCCA GAITITCACAC AGAGGICAGI ACATCGGICA ACTITCCICC CAGGAGGGGC CGGGGCIGGI GGGCCATGCC CACTCCGIGC CACATGCCTA GCAITCAGAG CTITGIAAGG AAGCCCIGIT CIAAAIGCIC AGGICCCCACC CTICCITGIC AAGAGAAGCC AIGGGCTTCC TGCTCCTGIG TCACAGTGIG CCACTIGAAG GGIGGCICIT CCCCATTCIT CTICCATGGG GGCCAG

### SEO ID NO:2098: (Length of Sequence = 324 Nucleotides)

ATTGGITTIN TIGAGIGIT TCITCITTIT NITIGITTIC AACATACTIA CIGCGIATAA AGICATGCAA AGAAAACAGT GCAGACAGTA GATCCTAGIG GATGIGCCAA GGIATICCAC TCAGAGTCAA TCCCAGGGAA AGAGGGAAAG AGGAAAAGAA AGAGAGAATG CGAACCCGAG GCTGCAGGAT GAGGCATGAA GAGTAGAAAT TCCCAGTGCT TIGCTGTGGI CATCAGACGC CAAGGGGAGA GAGGCAATNA AGACACACGC TCACGGGCCC CCCAGAGGIG GGTGGGGGGT GCTGGGGGCC GGCACACAGA TATG

#### SEQ ID NO:2099: (Length of Sequence = 299 Nucleotides)

GAAACCGICA GIAAGGAGCT CITTATCTIT ACCITCCCAC TCCAAACCIA CITGCTAGCT GITCITATCA TTGCCTCCIT
TTTCTCTGIC ACAAAAATGT GITCCATCIT AATGAACACA TTTCATTAAT GICCTTCTTA ATGAAGGACA GICCCTTTCC
CIGIGCTGIG AATCCCATAG TAATGACATT AGCTTAAGIT TTCTGAGCAC TTGCTATCIG CCAGTTCCTC CCATGAATTA
TCTTGCTTAA GCTTTGCAGT ATACCTGTGA AATAGGTGGC AGTAGTTGTC CCACCATAC

#### SEQ ID NO:2100: (Length of Sequence = 308 Nucleotides)

GGCAGCTIAT TITIGATIGG TICACAATGI GGATCAAACA GGAAAATCIG TIATCATCAA CAAGACCAGC AGCACCAGAA
IMINCOGAGI CITICCAGCAG TGCAGGCICC TCAGGNICGC TGTCCCGCAC CCATCCACCI CTCCAGGAGCA CACCCCTAGT
CTCAGGIGIG GCAGCIGGCI CTCCAGGCIG TGIGCCTIAT CCAGAGAAIG GAATAGGGGG CCAGGIIGCI CCCAGCAGCA
CCAGCIACAT CCICCITCCA CITIGAAGCIG CAACAGGCAI CCCGCCTGGG AAGCAATCCT TCITITAAT

### SEO ID NO:2101: (Length of Sequence = 291 Nucleotides)

GATGATGAT GCATGGGTT TGATGCTACA CTGGATCATA GAGTGTGGGT TCTTTCTTAC ATGINITGGT AGATAAATGT
CATAGACTGA TCCTGAATCC ACATCAACAG CATGGAATCC AGCACAGGAT CCATAGATCA CTTTCAACCT CTGGCCTTCC
TCAACAGTGA GATCCACCAG TAATGGCTTA TGTACCAATT CTCCAAATGA CTTAAAGGCC ATAAATTTGG TGATATGGCT
TTGGNGCCCA CGCATAGGAC TTCCACAGAA CTTTTTCAAA GGCAATCACC C

### SEO ID NO:2102: (Length of Sequence = 323 Nucleotides)

GATGATGATT GCATGGGGTT TGATGCTACA CTGGATCATA GAGTGTGGGT TCTTTCTTAC ATGTGTTGGT AGATAAATGT
CATAGACTGA TCCTGAATCC ACATCAACAG CATGGAATCC AGCACAGGAT CCATAGATCA CTTTCAACCT CTGGCCTTCC
TCAACAGTGA GATCCACCAG TAATGGCTTA TGTACCAATT CTCCAAATGA CTTAAAGGCC ATAAATTTGT GATATGGCTT

TGGTGCCCAC GCATAGACTT CCACAGAACT CTTCAAAGCA ATCACCAGAA ATTTGATTCT TTCATATTTT ACAACTTTAT

### SEQ ID NO:2103: (Length of Sequence = 270 Nucleotides)

CCTTTCACTC CCCCGCCCTG GGCCTCTGCT CTCTTGCCTG GNTTCCTTCT TTTTTGAGGG AAAGAGGGTG GGGCTGCAGG CAGTCTACTG GCAGGACGGG AGGCTGAGTC CTCAGGGTCT CACACCCTCA GTGCTGATGC CATGCCAACT GCCTGGGACA ACACCAACAC GTAAGGACCT AATTAAACCA AACCAGAGTC GGGTGTAGAC CAGCCCTGGG ATTTCCAGCT NIGACTNGGC CAGGGCACAC GTTGGTCTCG GCAGTGGCTG

### SEO ID NO:2104: (Length of Sequence = 367 Nucleotides)

### SEO ID NO:2105: (Length of Sequence = 288 Nucleotides)

GCAAAATTAC TGAAACTACT ACTITGGCT CAGAACGAGC TGGACCAGAA GAAAGTAAAA TATCCCAAAA TGACAGACCT CAGCAAGGGT GTGATTGAGG AGCCCAAGTA GCGCCTGCNC TTGCNTGGTG GATCCAACAC CAGCCCTGCG TCGTGGGACT TGCCTCANAT CAGCCTGCGA CTGCAAGATT CTTACTGCAG TAGAGAACTC TTTTTCTCCC TTGTACTTTT TTTTGACCTG GNATCTTTTT ATAGGGAAAA ATGGCCTTTG TAGGCAGTGG AAAACTTG

### SEO ID NO:2106: (Length of Sequence = 349 Nucleotides)

GCAAAATTAC TGAAACTACT ACTITGGGCT CAGAACGAGC TGGACCAGAA GAAAGTAAAA TATCCCAAAA TGACAGACCT CAGCAAGAGT GTGATTGAGG AGCCCAAGTA GCGCCTGCNC TTGCNIGGTG GATCCAACAC CAGCCCTGCG TCGTGGGACT TGCCTCAGAT CAGCCTGCGA CTGCAAGATT CTTACTGCAG TAGAGAACTC TTTTTCTCCC TTGTACTTTT TTTTGACCTG GCATCTTTTT ATAGGGAAAA ATGGCCTTTG TAGGCAGTGG AAAACTTGCA AGGAAAGCTG CCGTCTCTTT TGGCAGTCTT GATGCAGAGC CTGCACTCTG GCACTCGCT

## SEO ID NO:2107: (Length of Sequence = 329 Nucleotides)

GTGACAAGCT CCAGAAGCCC GCNTCGCAAC ANCCAGGAGG GCCAGGCCAC TCCAGGCAGG AGGCAGTGGG CTGGCAGCCA
CCCTGGGCAC AGAAGAGCAG ACGCAGACAG TGCTGGGCAA CGAGGGGCTT TNTTCATGGG CCCGCCTGCC CTGTCCCTCC
CCCCAGGTCC CCACCTTCTA GGGTTAAAGT GCAGCTGGGA GGGAGGAGGC AGGCAGAATT NGGGAGCTAG AGAGAGCCCA
AGTGAACCCT GACTGTCCAC GCAAGTCCCA TGTCCTCCTC GTCCTGGAGT TCCTCGAGGT TCAGCGAGCC CATCCCGCCT
AGGGCCTCT

## <u>SEO ID NO:2108:</u> (Length of Sequence = 261 Nucleotides)

TITICATGGC AGCCTGAGCA GACTAAGACA GCAGCTAACA CAGCAAGATC ATACCAGTTA ACCITICCTGG TTAGAAGACC TGAGCCTCCT GACTTCCGGT CACTGGATAC TCTCTGTNAG GCTCATGATT TAAACTCTGT AGTCACTGCT GGCTTGGAAA CCTCTAACTC TCTCTGCCTC TTGACAGTGT TCCCTCAAGG GAGTCCATTA GCCAGGACTA GGTTACATGC CCCTGTGTTA GCCTGTGAGGG ACAAGGCAGA G

SEO ID NO:2109: (Length of Sequence = 329 Nucleotides)

TITITCATGGC AGCCIGAGCA GACTAAGACA GCAGCTAACA CAGCAAGATC ATACCAGTIA ACCITCCIGG TIAGAAGACC
TGAGCCTCCT GACTTCCGGT CACTGGATAC TCTCTGTTAG GCTCATGATT TAAACTCTGT AGTCACTGCT GGCTTGGAAA
CCTCTAACTC TCTCTGCCTC TTGACAGTGT TCCCTCAAGG GAGTCCATTA GCCAGGACTA GGTTACATGC CCCTGTGTTA
GCTGTGAGGG ACAAGGCAGA GAAATAACTG CCCAAGTTCA GCTTCCCATA ATGTTTGGGG GATGCTATGA CTCAACTTTG
ATCTATTTT

SEO ID NO:2110: (Length of Sequence = 271 Nucleotides)

GECTIGAGCA GACAGAACGE GGAAGACTOC ACTOTGICCO GAGGGGCCAG COGCAGITOG COCAGGGCCA COCTGCCCTG
AGGICCITGI GIGGCCGCCC TGGCTIGGCA GCCCIGCCCCA CGCIGCCCCC GCAAACAAIG GIGIGIGGGI TTITACAGCC
CITTITAGGA ACCCAATAIG GGCATAAAIG TAACACCTGI AGCGGGGGCA GAITCTCTGI ATGINCAGIT AACAAATTAI
TTGIAAIGIA TITTITAGA AACCTIAAAA T

SEQ ID NO:2111: (Length of Sequence = 315 Nucleotides)

GECTTGASCA GACAGAACEG GGAAGACTCC ACTCTGTCCC GAGGGGCCAG CCGCACGTNC NCCCAGGGCC ACCCTGCCCT.
GAGGTCCTTG TGTGGCCGCC CTGGCTTGGC AGCCTGCCCC ACGCTGCCCC CGCAAACAAT GGTGTGGCG TTTTTACAGC
CCTTTTTAGG AACCCAATAT GGGCATAAAT GTAACACCTG TAGCGGGGCC AGATTCTCTG TATGTNCAGT TAACAAATTA
TTTGTAATGT ATTTTTTAG AAATCTTAAA ATTGCCTTTG CACTGAAGTA TTTTCATAGC TGTTTATATC TCTTT

SEQ ID NO:2112: (Length of Sequence = 275 Nucleotides)

GCAAGANAGA CCAAAACCTA ACCTGAGTTA CAAGAAACAA GACAGTAATG GCTATAAAGG GAGTGACCAG GAGCAACTGG
GACACTCCTT TACCTCCCAT ATCCAATGTA TGINITTCAC AGAAAAACAA CAAAATTAAC AAAATCACAA AATACAACAG
CTAGAATTAC AAAATCCATT CATCCAAGGG TGGTAGAAGG CAGGATGGNA AGGTGGAAGG GTAAATNGCA CAGGGAGAAA
AACAAAGTGT TCCAATCAGT CCAGGCACAG GGACT

SEQ ID NO:2113: (Length of Sequence = 227 Nucleotides)

GGCGCATCAG TGGGGGGTGC TGTCAAAATT AGTGAAATCA GATACAGTTG ATGGGCAGGG AGGGTGGGGT AAGAGACAAC TCCAGTGCAG TGCCAGGTGG GCAGGCTCCC ACTGTTCACT TGAGACGCTC CTCCCCACTC AGGTGGGGAC AGGGCACACA CTCGCAGGGC AGGGCATTCT GGAGGTGTGG GTACAGGTGA GGGGAAATGG GAGGCACAGC CAGGAGT

SEO ID NO:2114: (Length of Sequence = 339 Nucleotides)

GECGCATCAG TGGGGGGTGC TGTCAAAATT AGTGAAATCA GATACAGTTG ATGGGCAGGG AGGGTGGGGT AAGAGACAACA TCCAGTGCAG TGCCAGGTGG GCAGGGTGTGG GTACAGGTGA GGGGAAATCG GAGGCACAGC CAGGAGTGGG GCAGGAGGGA AGGCCAGGTTC GTAGGAGGGC TGAGGAGGGA ATATNACCCC CCTCAAGTCC CCAAAGTGGC AGGCAAGTTA AGGGGCCCTG GATGAGGTGG CCCCTCATG

SEQ\_TD\_NO:2115: (Length of Sequence = 262 Nucleotides)

TEGRACACAA AATTCCCTET NTTAACATTE TACATTCGGG GCCTAGCTGC CCTTGAGGAT GTCCTAGTTA CACCCTCTCT GATACCTGTG GAGTTTAAGC ACCATTCCTA CCGCTGTGTC CCTTNGGAGG GGGTGCAGTG GAAGCTCTTA AAGGGGAATG CTTGCTCTGC CTCTGTGGCT TTTTGTTTGG GAAAGGGAGT TNGGATTNGA GGATTTAGAT TINAGGTCAT GATGTCAGAG CACACCAGGA ACTCCCAAGG CT

SEO ID NO:2116: (Length of Sequence = 153 Nucleotides)

AAGAAGCGAA GAGGATTCGT GAGCTGGAGC AGCGCAANAC ACGGTGCTGG TGACAGAACT CAAAGCCAAG CTCCATGAGG AGAAGATGAA GGAGCTGCAG GCTGTGAGGG AGAACCTTAT CAAGCAGCAC GNGCAGGAAA TGTCAAGGAC GGT

SEO ID NO:2117: (Length of Sequence = 231 Nucleotides)

GAATATAATG TGTATCINCA AGGNICGATC CACCCITNCC CATCCINIGG AGCTCAGAGA TTCTTGGGAG CIGAAGGTCT TCTTAATGTC AGATCAGCAA CCCCAATCTC AGGCAGCTCG GATTCGCTGC TCTCGATCIN CCGCTGGCCA ATGTAAAACC AGACGCAGGC GACCCAGTGC GCGACAGGGC GAACACGGCC ATGAGCAGTG TCAGCCACCAC GGCGCTGTAC T

SEO ID NO:2118: (Length of Sequence = 309 Nucleotides)

SEO ID NO:2119: (Length of Sequence = 308 Nucleotides)

GGIAATCGIT GAAGATTACC AAACGITTAT TICGAATGAC ACAGCACTGA AAACATAATT GITACAGATG ATTIGIGGAT ACAGCATACA CCATCTATTT TACTITIAGAA CAATCIGIGA AGATGAGITG CATAAATAGA AAGAGGITGA AATATAGAGG AGCIGITTIT ATAGIGITCT TITGGGGGTA GATGAATATG CCCCATCTIT CTACCCAATC TCATAAAGGC AGAAGAGAAG ACTGCTTAGC TGCCCATCCC AACTAGCCTA CCTCCAGCCA CAGCGGCTGG ACAGCTAGAT AAATCAGG

SEQ ID NO:2120: (Length of Sequence = 237 Nucleotides)

CCGCTCTCCT GACGGAGCC CACTAGGGGG TCCTCTTTCA TCTTTGGTGT GGCCTTACCT CCCACCAAAG AGATCCGAGG CTTACTCTTC TCTCTCGGG ACCAGCATGA CCCAGGAGTC CTTCCAGGAG AGCTCTGTGA AGGAGCTGAG GCGCCTGGAG GACCAGCTGG CCGGCCTGCA GCAGGAGCTG GCGGCTCTGG CACTGAAGCA GAGCTCGGTG GCGGAAGAAG TGGGCCT

<u>SEQ ID NO:2121:</u> (Length of Sequence = 224 Nucleotides)

GOGGICAGAG GCTGAGGCCA GAGAGGTAGC AGCGGAACTN ACAGGGAGGC CAGGGGCAGA GCTGACCCTG GAGAGGGATC CTNATGTCCT AGACACATGG TTTTNTTCTG CCCTGTTCCC CTTTTNTGCC CTGGGCTGGC CCCAAGAGAC CCCAGACCTT GCTCGTTTCT ACCCCCTGTN ANTITTGGAA ACGGGCAGCG ACCTTCTGCT GTTCTGGGTG GGCC

SEQ ID NO:2122: (Length of Sequence = 202 Nucleotides)

CAGCTGCAGC TTCCAACCAA GAAAACCTCA AAGCATTAGG GAAGGAGCAG GTGTGGGGCT GGGGTGGGGA GAATCCCCTA
AGCTCCAGGG CCCAGGGTCT AACCTGAGAG GTCGGGGCTG CAGGAAGCTG GGGGAGGCTC CCGGGGCTGG GGGAAGAGAG
GCCTGCCCCC AGCAGAAACA GCAGGTCTCA GCGGCTACAT GT

SEQ ID NO:2123: (Length of Sequence = 359 Nucleotides)

ATTCTCCTCT GITCTCTTGA TGTGTAGGGA AATTTGAAGA ATGACTCTGA TAAAAATCTA AAAGAGAAAC ATCGAATCCT
AACTGGCTGT GTGACCCTAA AACCTTACTC CGTCTCTTTG AACCTCAGAT TTCTCAGGGC TTGGCACATA GCAAGCATTT
CATACTCAGA AGCTGGTACT ATTACTGTTG TGTTTTGTGG GGGGAGGTTT GTTTGTTTTG TTTGGAGACA GGATCTGGCT

TTGTTGCCCT GGCTGGAGTG AAGTGGCGCC ATCATAGCTC ACTGCAGCNT CGCCCTCCTG GGCTCCAGCG ATCCTCCCGC CTCAGTCTCC CGAGTAGCTG GGACCACCTG CGGATGCCG

### SEQ ID NO:2124: (Length of Sequence = 233 Nucleotides)

GAAACGCCGT GCATCTCTTG TCTGTTGGCA GCGAGCACAT CGTNTGGAGA CACGAGTTTC TAAGCAGCTG GCACGAGGGC TGCTGACGGC ATGGGTCGTG CTTCAGGGTG GCAATACCTC TTAGGAACTT AGGGCAGGAA GCAATACTTC AGCATTGAAT GTGTGTAAAT AGTTGCTTTG AGTTGCAATT GCTATTINCT TCTCAGTCCC AGCTCAGATC GAATTATATA TCC

### SEQ ID NO:2125: (Length of Sequence = 241 Nucleotides)

GCCATGGCTT TTGGTCAGGT TCAGGGGGGC TGAGGGGGGTG CTCCTCCCCT CCCCCAGGC ACTGACACAT TGAAAGGAAG CAGAGCAACA ATGACACAGC ACGGATGTG GAAAGGGGGT CCCCCACGC GGCAGGATGG TCCATCTCAC CGGGGTCTCA CCAGGACCTCC CCAGGGCCAC CCAGGGCCAG CACGAGCACC TCCCGTTTTC TCCCCAGTGC AGAGCGTGGG GTGACAGGAG T

## SEO ID NO:2126: (Length of Sequence = 275 Nucleotides)

GTGTGCCCTC TTGCTGTGTC TTACTTCATA AGGAGTTGTA TCTTCCCACC TGCATTTCAA TACTGCCGGT TAGGACCTAA GTAGAAGAGC AGTAAAGGCT GATTGACACA CAGGGGGATG GAGTTGGTCC TTGTCCATTC TCTCACCCTT GCTGTGCATG TATCAATCCT TATCCCAGAA GGTACTATTT AGACTGTATA GACTGATTTA GATTACATAC TTTAGAGGAT TAAGGAAAACC ATAGAGTTTG GGCCTTGGAA CTGTTACTGC CTTGT

## SEQ ID NO:2127: (Length of Sequence = 296 Nucleotides)

TTCAGCCTTA TCGAAACACA TGAAGCAAAA CCATTGAAAC TGTATGTGTA CAACACAGAC ACTGATAACT GTCGAGAAGT
GATTATTACA CCAAATTCTG CATGGGGTGG AGAAGGCAGC CTAGGATGTG GCATTGGATA TGGTTATTTG CATCGAATAC
CTACACGCCC ATTTGAGGAA GGAAAGAAAA TTTNTCTTCC AGGACAAATG GCTGGTACAC CTATTACACC TCTTAAAGAT
GGGTTTACAG AGGTCCAGCT GTCCTCAGTT AATCCCCCGT CTTTGTCACC ACCAGG

## SEO ID NO:2128: (Length of Sequence = 322 Nucleotides)

GCATGGGAGG GAGGAAGAGA GGTTTGGGGT GCGGTGGCAG GTGATATAGG GAAAGGGCTC ACGTTTCAGA ATCTGTGAAC
AATTCCATTT TTCATCAGAT AGCAGAACAA CTACAACAGC AAAACCTAGA ACATCTCAGA CAGCAGCTCT TGGAGCAGCA
ACAGCCTCAA AAGGCCACTC CTCAGGATAG TCAGGAAGGA ACCTTTGGGT CAGAGCATTC AGCGTCACCA TCACAAGGGA
GTAGTCAGCA GCATTTTCTT GAACCTGAAG TCAATTTGGG ATGATTCCAT AGATATTCAG CAACAGGATA TGGATATAGG
AT

# SEQ ID NO:2129: (Length of Sequence = 222 Nucleotides)

TTTAGTGGGT CTGGGGTGGG CGCGGCCCCC GGCTAACGG GCGGGTCTCC TCCTCTAGGC GCAGGAGTGC GCGGTGCTCT CCAGGCCTCC CCGGCTAGGT GGAGCGTGAC ACCGCAAAGC ACACGGTCCT ACCGAGGCG GCCCCAGGCG GCACCAGCCC CTCCCCAGAT GGAAGTGCCC GGCAGACAGC TGCCCAAGAC CTCACAGAAC AAAGATGGAC AT

# SEQ ID NO:2130: (Length of Sequence = 191 Nucleotides)

GIGGGATGCT TTATTTCACT GIGGGGGGA GGGAACCTGG ACAGGGGGG GCAGGCGGGG TGGGAGGCTG GCACTCAGGC GGGGACTAGG CAGGGGAAGG GCTGCCCCCA GGCCTGTTGA GGAGAAACTN AGGCCAGCCC TGGCGGAGAC CTAGCCCAGC GGGGTAAGGA GGGTGGGGGA AAACTGGGTC T

## SEO ID NO:2131: (Length of Sequence = 280 Nucleotides)

CTGAGTCTTG TOGATCCCGA CCAGGAAGAG CAGCTCAGCC AGGAAGAGGT TGATGCACAG GITCTTGTGG ATGGTGTTGC
GGTCGGTCTG CAGCCCCGC AGAAGCAGAA GGTGGAGATG CAGATGGCCÀ AGCAGACCAG GGAGATCACA ATGCCCACCC
AGGTGATGAC CGACAGCAGC AGCTCGTTGA TGCGGCCCTG GTAGATCTCA CGGTGAGCCA TGAGCACAGC GAAGTTGGTG
AGGTGGCTGC AGGCACACGT GGTATGGGTC TTGTTGGACT

## SEO ID NO:2132: (Length of Sequence = 201 Nucleotides)

ATCCCCACAC CATTECCTEC TCCTCCCATE GGGCTTTAGC TCCCCTGACC ATCTGCTCAT GTAGCCTCTG ACTGGGCGCA CAGTGGTGCA GGAGGAAGGA CCGGGAACCC TGTGTGGCTT TGGGCAAGCT GACAAACCCG TCTGGAACTC AGTTTCCCCA GCTGTGAAAT GGGGCCAGTC CCCATGCCCT GCTGTCCTCC T

#### SEO ID NO:2133: (Length of Sequence = 180 Nucleotides)

GATGAAAATG TTGTGACCAG AGGCTTGCCA TTMCCTAACT CTATTTGCCA GAGGAGCAAT AGTTCTGTAT TCGCTAATTT TGTGTTCACA GAGACTTTAA GGAACATGAC TGTTGGGAAT AACAAGAATT AAAGGTATTT ATTTACTTMC TCTATATGAT TGTAATATTA TACCCATACT

#### SEO ID NO:2134: (Length of Sequence = 302 Nucleotides)

ATGAACAAAC GGGACTATAT GAACACTTCG GTACAGGAGC CCCCTCTTGA CTACTCCTTC AGAAGCATCC ACGTCATTCA
AGATCTGGTA AATGAGGAGC CAAGGACAGG ACTACGACCA CTGAAGCGTT CAAAGTCGGG GAAATCACTG ACCCAGTCCC
TGTGGCTGAA TAACAATGTT CTCAATGATC TGAGGAGACTT CAACCAGGTG GCTTCACAGC TGTTGGAGCA CCCAGAGAAC
CTGGCCTGGT TCGACCTGTC CTTTAATGAC CTGACTTCCA TTGACCCTGT CCTAACAACT TT

### SEQ ID NO:2135: (Length of Sequence = 291 Nucleotides)

TCTTACCAAT CTGACATTCA CTATCAACCA CTTCTTGACA CATGTCATAG AAAAGTGACA TCTCTTTCCC TTCAACCAAT ATATCCTCCA ACAACATCAA CCTCAACAGG TAGCTAGCAT TGTCTTCTGT TGAAATTTAG AGCTGGAAGA AAAGATTTCA CAATCTCTCT GTGGAGACCC AGGAATCCGT TACCTTCTGG GATTTTAGAG AGTGTGGAGA GAGATGAGCA GGCAGTGAGC CGGGGACCAA CTCCGATAAG AATATGAAGT CAGGAAGTGA GAGAGGAAAC G

## SEO ID NO:2136: (Length of Sequence = 282 Nucleotides)

GCTGTACAAG GTCTTTTCT TTGTTGTCAT GGTTGATTT GTACATTTCA GCATTTGCAT CATACAAAGG GGGAGCAAC AGCCATGGCT TTTGGTCAGG TTCAGGGGGG CTGAGGGGGT GCTCCTCCCC TCCCCCCAGG CACTGACACA TTGAAAGGAA GCAGAGCAAC AATGACACAG CACGGATGTG GGAAAGGGGA TCCCCCCACGC GGGCAGGATG GTCCATCTCA CCGGGGTCTC ACCAGGACTC CCCGCTCCCA CCCAGGGCCA GCACGAGCAC CT

#### SEO ID NO:2137: (Length of Sequence = 322 Nucleotides)

GAATTGACAA CATATTGCCA AAATCTTAGT GGATTTTGCC AACACTATTC TGCTGATAGG AAAAAAGAAT CATTCAGCTA
CTTTCCAATT TAGCCACAAA ATAGGCTCTT TTTTCTTCAT TACTACTTTA ACCAGTATGT TAATACTGAA AATAGGTATA
AAGAAATCAC AAATAACCTT CTTCTGTTTG AAGGAAATTT AAAATAGCAC ACTTAAATTG AAAGINAAGG GAACTTTAAT
TCACTACTGT AATTTTTAAA TGTCTGTATC ATGTAGTGTT TGCACAGTTT TAACCTTAGT TTACCATCTC TTACTCCTTA
GT

SEQ ID NO:2138: (Length of Sequence = 305 Nucleotides)

ATGCTGAGTC GCAGTTCCGA TGTTCTTATG CTTCCATCAG CAAATCTCAA TTTGTCAAGA TTCATGACAG ATTCTTCCCC
AGCGTTTGGT TTAATTGGAG GGACTTTATC TCCAGGCCTG CATGACTCTT CGATGCTCAG GGCACATGCC CGACCAAAGA
CAACCAGGTC CAAGAGCGAG TTTNCCCCCGA GGCGGTTGGC ACCATGTACC GAGGCACAGG CGGCCTCCCC ACAGGCGTAC
AGGCCGGGCA CAATCTGATC CTGGCCATTC ACGTGCCTCA GGACCTGCCC CTTGTAGTTG GTGGG

SEO ID NO:2139: (Length of Sequence = 263 Nucleotides)

CGGCCCCCAG CAACAGCTTC AGCCCTCTCC ACCAAGCTTG CCATCAAGGA GATTGCACCA CTGCACTCCA GCCTGGGTGA CAGAGTTAAG ACTCTCATGG GGACACTACT GTTCAAAAGG CCCTGGCCAA ATAACTCCCA AATGAAACAC TCAACCCCAAG GATGTTTTCA GCCCACTGTT AGTGAAGCTG GGTGCAGAAT GCAAAGCCTC TAAAAAGGAGA GGATACAAAG TCAGGTGAGT AGGGGCCCATT GGCAATGCTC AGA

SEQ ID NO:2140: (Length of Sequence = 255 Nucleotides)

CTGCTTCANI CTGCGCCCCT CAGCIGTGGC TTCCCGGCAT GCCCTGTGAC CCCAAGCCGC AGGIACAGGA AAGAAGTTTG
TGCTGGGGGA CTCAAAGACC CAGAGGTTAA TTAACAGGAA CCAGGGCCAG GGGCCTTCAT CTAGAGGTCA GTGGAGTCTC
CAGGGCACTC ATCACTGTGG CTGGGAGACT ACAGTGTCTC GGCTGCGGAC TTGTGGAAGA AGAGGGGGAA GGATGGGAGA
AGGGGTGACT GGATG

SEO ID NO:2141: (Length of Sequence = 355 Nucleotides)

TITAATTAAA TACCACTICA TAATGITATI TGCACCTAGI ACTITITITI TITTAAATAA GACATGCCAT AAGTOGIGAA GTTAACAAAA TATAAGCATC CGCACAGAAT ATATICTAAG GTGACTTCAT TTACACCGCT TCTCAGAGAA ACACACAAGT AACTITITGI CTGCCTATCA GCCAGTGTTG AAACAGCTTT GGAATTCACA TGGAAGGCTG CCGGGCTGGT TCCCCAACAC TMGCCTGATG GAGTCCTGTA TCCCMACCGT GCCGTCAAAC TGGCTGGTTT CCACTAGAAA AGCAATGGAG AGTCAGCTCT CCCTTCTTTA CCCAGCGTTC AACTCCACAC TGCAA

SEO ID NO:2142: (Length of Sequence = 391 Nucleotides)

CTGCTAAGTG CCATGAGACC TTAGCAGAGG CTGTGGGTGC CCCGCCCCAT TCCCTCCACT CACTCTTCCT TGCAGGTCGA
CCTGCCCTTC TTTGCTGAGG CCTTTCTCTG CCTCCAGAGC CTGCTTGGTC CTCAGGCTGT AAGTGCAGGC AGAGCTAATG
TCTCTCCATA GCTGCCCTCC ACCAGCCTGC TCCTGAGACA CCTGCTGGCC AGCAGCCTGA AGCAGAATCC TTTACTCAGA
TTCAGCCGCA CAGATGCTCA CTGCAGAGAT CTCCAAAGGNC TGTGGTCATC CTTGAGCCCCA TCTCAGATTT GTGTGGATAG
GGTGTTAGAG AACATGGAAT CAGCTGGATA GAGTGGTTCA TGCTTGTAAT NCCAGCACTT TTGGGAGGCT T

SEO ID NO:2143: (Length of Sequence = 326 Nucleotides)

GATGCAGAAC AGCTTCTTGC AGAAGCACCT GCTCCGGCAT CCAGCGCTGC CTGGAGGCAG GAAGGAGAGG CAGGGCAGGA CACGCTGGTC TGAGATGAGG GGGAGCCCCA CGGGCCCCAG GCAGGCTAGA GGAGGCACAG GCCCTGCCAC GGCCAACCTC GGTCAGCCAG CCTGAGGCTG TGGCCTCCAA AGGGTCTGGG CGCACCCCCC AGGTCGCAGG TWINTGAGGC CAGCCAACCT GCAGAGCACT CGCGGCGTGG GTGGGCTGAG TGGAGGTGCC TGGGAAGCTG CCTAAATTCA GAAGCCTCCA CTTGCCATGG AGACTG

SEO ID NO:2144: (Length of Sequence = 357 Nucleotides)

GCACCGGGCC CCAGGAGCCC ATCAGTGACA GAGTGCTCCA TGATGATGTC CTCCACCGGG GTGATGTACA GCAGGGTCAN AGCACCCCCA GGAACTGGGA NAGCAGGATG CCCAGGAGGA TGCCCGCCAT GATGGTGTAG TTGTCCATGA ACCAGATGAT

CACGGCGTTG GTGCAGCCCC GCACGTAGAT GACATCCTGC ACACTGAAAC GCTCCTTGTC GATAGTTTTN TAGCCACACA
TGGTGTTGAC AACTTCTGTC GTGTTCCTGA TGCAGCAGGT GTAGGGCACC CCACAGGCCA GGGGTCCAGG GGCACTGCAG
TCGTGGTACT GATTCTTGCT CCAATCTCGG TAGTCCT

### SEO ID NO:2145: (Length of Sequence = 420 Nucleotides)

CECCAGGAGC TECTAGCCAA AGCATTGGAG ACCCTACTGC TGAATGGAGT GCTAACCCTG GTGCTAGAGG AGGATGGAAC
TGCAGTGGAC AGTGAGGACT TCTTCCAGCT GCTGGAGGAT GACACGTGCC TGATGGTGTT GCAGTCTGGT CAGAGCTGGA
GCCCTACAAG GAGTGGAGTG CTGTCATATG GCCTGGGACG GGAGAGGCCC AAGCACAGCA AGGACATCGC CCGATTCAAC
TTTGACGTGT ACAAGCAAAA CCCTCGAGAC CTCTTTGGCA GCCTGAATGT CAAAGCCACA TTCTACGGGC TCTACTCTAT
GAGTTGTGAC TTTCAAGGAC TTTGGCCCAA AGAAAGTACT CAGGGAGCTC CTTCGTTTGG ACCTCCACAC TTCTGCAAGG
CCTGGGCCCAT ATGTTGCTGG

#### SEO ID NO:2146: (Length of Sequence = 390 Nucleotides)

CCCAAATACT GTTTCCCAAA CTATGTCGGG CGGCCGAAGC ACATGCGGGT NATGGCTGGA GCCCTGGAGG GGGACCTCTT
CATCGGACCA AAAGCAGAGG AGCACCGGGG GCTGCTGACC ATCCGCTACC CCATGGAGCA CGGCGTGGTG CGAGACTNGA
ACGACATGGA ACGCATCTNG CAGTACGTCT ACTCCAAGGT TCAGCTGCAG ACCTTCTCGG AGGAGCATCC TGTGCTCCTC
ACGGAGGCCC CGCTCAACCC GAGTAAGAAC CGGGAGAAGG CGGCAGAGGT GTTCTTTGAG ACCTTCAACG TGCCGGCCCT
GTTCATCTCC ATGCAGGCTG TTCTCAGTCT GTACGNAACA GGACGCACGA CAGGAGTGGT TCTAGACTCA

## SEQ ID NO:2147: (Length of Sequence = 219 Nucleotides)

TITGIGGITG GAGAGAAACT GGIGITCIGC COGCTCIGC TIGGICACAG ACAGCTCCAG CAAGAGCAGT TGITAAAAGT GCCAAGCGIG TGTATCACTIG TGACAAGCCG TITGCTTACT GCCCTGTTCC CTINCAGCCA AACCAGCTGA TGAAGAACTG CTGCCAGGAG GGICCTACAG CAGGICACAA ATGACCTAGT TTCATTITAA GCAGACAGA

#### SEQ ID NO:2148: (Length of Sequence = 353 Nucleotides)

GAAATCITTA TIACAAAAAT ATTITGCAAG CCAAAAAGIT TAAGITGCAA CTATATACAA AATGGGGCCT GITTCCTTCC CAGCAGTCTT AAAATAAACT CCTGAAACCA TGCTCCTTCC GCAGGTTGGT TCGACCTCTT CCTTTTCCTG GGGTTCAATA CACAAGGTAT GIGGATTCTC CAGGTTGCCA GGCTAAAGCT AAAGCTATAC ATCTTCCTTG GCCTTATTTCCC CCTCCAAGAA TIAAAAAATA AAATAAAATG AAAATGGCAC CAAGAAAACA TICTTTTAAA ATACTGAATG TGTGTGTGCA TGCGTGTGCA CAGTATGTCC CTGTTCTCTG GGT

# SEO ID NO:2149: (Length of Sequence = 394 Nucleotides)

GOGGAGACIT TGGGCITINN TCATGACIGI TIGGGICGAA GGIAGCICAA GIGIGIGIGI GIGIGIGI GIGIGIGIGI GIGIGIGI GIGIGIGI GIGIGIGI GIGIGIGI GIGIGIGI GIGIGI GIGIGIGI GIGIGI GIGI GIGIGI GIGI GIGIGI GIGI GIGIGI GIGI GIGIGI GIGI GIGIGI GIGI GIGI GIGIGI GIGI GIGIGI GIGI GI

#### SEO ID NO:2150: (Length of Sequence = 200 Nucleotides)

ACCTCCCTGG GCCTCGGAGA CGCTGACAGC TGGGACGACA GCAGCTCCGT CAGCAGCGGC ATCAGCGACA CCATAGACAA CCTCAGCACT GATGACATCA ACACCAGCTC CTCCATCAGC TCTTATGCCA ACACACCTGC CTCCTCTCGA AAAAACCTGG ATGTGCAGAC TGATGCTGAG AAGCACTCAC AGGTGGAGAG SEQ ID NO:2151: (Length of Sequence = 369 Nucleotides)

GUCCCAGGIT CACTOGICIT ACAGCAGICC TAAAGAGCCG GCIGCCCITT CCCTAGGCIT CCTTGCTCTT NAGGCCTAAA
TUCCAGCCCT CCTACCCCCAG TGCCACTTGG GTAAAAATAC TCTGCTCCTC TCACGTTTGC TAATAAGCCC GGCTCCGAC
TACCACCGIT CGGGGAAGG GAGCCCCTTA CCGTCATTGC TGGGTCCGCT CCGGGAAAAC ATGTGCCGGA CCTGACTTGT
GCGGCGGCAT CTTTCCGGAA ATGCCGTTTT TGTTTCCTTC TAAGGGTGT

SEO ID NO:2152: (Length of Sequence = 312 Nucleotides)

TTCACAAACA AATTGTGGGA GAAACACACC TTCCCAGCAA TAGAAAATCT CTATAAAGTG CATTTTGCCT GCAACCATCT CTTCCCCATG CTGGCCCTTG GGTCAGGATT TGAGGCACTG TTCCGAGGGA GCCCTCAGGG CCACCTGAGC TGGGAGAAGG GAGGCATGAA GCCACCATGG AGCTCCAGGGC TACTGGACAT ACCCTCTCTA CCCTGCCCTT CCCTNTTGGC TCCAGGAGTG CACTGCCCTGA CTCCACTGGC AGGTTGATCT GGGAACGGCC TNGGCATGCT AGGGATGGTG GAGAAGTAGG CG

SEO ID NO:2153: (Length of Sequence = 325 Nucleotides)

COCAGACCCA GAATGTAAAT NAGGCCAAAA TGGCCACTTC CCAGGCTGAC ATAGAGACCG ACCCAGGTAT CTNTGAACCT GACGGTGCAA CTGCACAGAC ATCAGCAGAT GGTTCCCAGG CTCAGAATCT GGAGTCCCGG ACAATAATTC GGGGCAAGAG GACCCGCAAG ATTAATAACT TGAATGTTGA AGAGAACAGC AGTGGGGGAT CAGAGGCGGG CCCCACTGGC TTGCAGGGAC CTGGAGGGTCT GCACCAGTTC CAGTGACCAC TTCAGAACCC ACCTNGGNGC ACCCCCCAAT GTGCTCTGGC AGACGGCATT GGCTT

SEO ID NO:2154: (Length of Sequence = 326 Nucleotides)

ATCATTIAAT TAACATCTIT AAATGAAACA CAGITITCIT CATGIGICIC ACTCAGGCTT CAGGGCAGAG GGAATGGATT
TITAGACATA TCAAAGACTC AAAAATTIAA AGAAATATAT ATATGIATAT ATATACTICT AACATTITAT GGAAATTAAA
AATCAGAGGC TITIGGICTC TCCATTIACT CTAGGICAAG CTCATTIACC CCAGAGGACA AAGAAGGGCT GCCICITCTA
GACCCTCCCT TCTCCTTTGI CCINIGICCC ACCCAGCAGG GAAACAAGCT CAGAAGGATC CTAACAGGAT AGAGITTCCA
GTAAAT

SEQ ID NO:2155: (Length of Sequence = 317 Nucleotides)

TGGATGAGGA GACCCTGAAC ACACCCTGCT ACTGNCAGCT GGAGCCCAGG GCCTGTNACA TCCTGCTGGA CCAGCTGGGC ACCTACGTTT TCACGGGCGA GICCTATTCC CGCTCAGCAG TCAAGCCGCT CCAGCTGGCC GINITCGCCC CCGCCCTCTG CACCTCCCTG GAGTACAGCC TCCGGGTCTA CTGCCTGGAG GACACGCCTG TAGCACTGAA GGAGGTGCTG GAGCTGGAGC GGACTCTGGC GGGACTCTGGC GGGACTCTGGC GGGACTCTGGC GGGACTCTGGC GGGCTCT

SEO ID NO:2156: (Length of Sequence = 372 Nucleotides)

CTTCCAGCTG GCAGCCCAGT GGCCCACCCA TGTCAAGCAC TTTCCAGTGG GACTCTTCAG TGGCAGCAAG GCCACCTGAG
GCCCTGTNTC CCAGCCACTT TCCCTCCTGG CACTGCCACC AGCCTCACCG AGTGGCGCGA TCTCGGCTCA CTGCAGCCTC
TGCCTCCCGG GTTCAAGCAA TINTCCTGCC TCAGCCTCCT GAGTAGCTGG GACTATAGCC GCGTGCCGCC ATGCCCAGCT
AATTTTTGTA TTTTTAGTAG AGACAGGATT TAACTATGTT GGCCAGGCTG GTCTTGATTT CCTGACCTCG TGATCCGTNC
TCCTCAGGCT TCCAAAAAATG CTGGGATTAT AGGCATGAGC CACCACAACC GG

SEO ID NO:2157: (Length of Sequence = 351 Nucleotides)

CTGGCTAACA TGGTGAAATC CCGTCTCTAC TAAAAGTACA AAAAATTAGC TGGGCGTGGT GGTGGGCACC TGTAGCCCCA GCTACTTGGG AGGCTGAGGC AGGAGAATGG CGTGAGGCAA CAGTGCAGCC TGGGCAACAG TGCACCTCCT CCATCTCTAC CAGCGTCCCC TCCAGTCTGC ACGGGGCAGT CCTCCTGGGC TTGACCTCTC TGTACCCACA GCTGGGGGCC AGGCAGCCCC CCTCTTATCCC TCCCAGCACC TACTACATCG NCCTNCACAT CCCTGATTCC TGTTGTTATG GAAACTNTTG CCAGAGATGG AGGTTCTCTC GGAGTATCTG GGAACTATCGC C

#### SEQ ID NO:2158: (Length of Sequence = 280 Nucleotides)

CAGCTCCTGA GGACCGCTGC AGTGATGACA CAGGACTATT GCATCAGCAT CGTGCTCACA GGGAATCAGA GCTCAGCCAG
GAGAGGTCCA AGAATGACAG AACCATGAGC ACTCCTACCA AAACTCAGCT CTGCTCAGCC AAATCAACAA TTCAACCCAA
CAGGACAACT CCTAACACAT CCCATCCAGA CAGACATTAG AGGCGCACAG CAGATGAACC TCCTACTTAC ACTGTCCAAG
GAAGCTGGAC TATCAATTCC CAGTAAAAGT GGGGGAAAGG

### SEQ ID NO:2159: (Length of Sequence = 342 Nucleotides)

CTIGIGCGIT TCTCCTACCA GATTGIGCAT GCCTCCTGIG GGCAGAGCCT GINCTGACTT GCTCCTGGGI CTCCAGCATC ACCCAGTCTG GAGCTGAGGA CCTGGGTACC TACAGATTTC CTTCCACACT GTCAGAATTG AGATGAAGGA AGCCCAGAGA AATCAAGTAC CCTCCACCAG GCAGAGCAAA GTCCTGGGIG CCCAAAATCC AGGGAAGGCA AGGGCTGGGG GTACAAGCAG AGGATCTGAA GAGGTATATG AGAGTNGCCA GCACAGACCT GGCATAAGCT TGGTGCTCAG TGAAGGTTAC CTGATGTTGC TGGGCACCAG GGGTGATGCA GT

#### SEO ID NO:2160: (Length of Sequence = 376 Nucleotides)

## SEQ ID NO:2161: (Length of Sequence = 404 Nucleotides)

CCTTCCTTCG GITTCAACTG GACTICTATC AGGICTACTT CCTGGCCCTG GCAGCTGATT GGCTTCAGGC CCCCTACCTC
TATAAACTCT ACCAGCATTA CTACTTCCTG GAAGGTCAAA TTGCCATCCT CTATGTCTGT GGCCTTGCCT CTACAGTCCT
CTTTGGCCTA GTGGCCTCCT CCCTTGTGGA TTGGCTGGGT CGCAAGAATT CTTGTGTCCT CTTCTCCCTG ACTTACTCAC
TATGCTGCTT AACCAAACTC TCTCAAGACT ACTTTGTGCT GCTAGTGGGG CGAGCACTTG GTGGGCTGTC CACAGCCTGG
CTCTTCTCAG CCTTCGAGGN CTGGTATATC CATGAGCACG TGGAACGGC ATGACTTTCC CTGCTGAGTG GATCCCAGCT
AACC

# SEQ\_ID\_NO:2162: (Length of Sequence = 339 Nucleotides)

CACTGCCITT TIGTAGCTTG GGATCTAATT TGTAACACCT TGCTACCTAT GAAAAGTGGG AATGTAAAAG GGAAAAAGCA
ACTTGGCATT TACTAAACTT AGGCTAACCA AAACCCTCTG TAGAGATCCT TACTAGACAT GGGTGCAACA GCAAGCATCC
CAGAGGACCC ACCACTGGGG TATGTTTTAG GCCAATGGAG CAAATTCAAA TTTGGCTAAA AGAAGAAGAA ACTCATTTAG
TATGGCAATA ATATTTGCGT TCGACACAAA GTGGCAAACC AACACATTTG GCCTAAACAT GGTTCTATAT GTTATAATGA
TACTTTACAA TTAGACTTC

## SEO ID NO:2163: (Length of Sequence = 285 Nucleotides)

CCCCGCCACC TCCAGCAGGA GCAGCTCAGT TIGIGGCTCT GGGAGCTCCG CTTTTGCAAA CCCAAAAAGG CIGIGCATTT GGAAGCCAAA CGCTCAGCAT GCGGCTGCCG AGICTGGTTT TGTGGACAAA GCAAACTGTG GAATGGCTTC TCGGTGTCTG TATAAAGGGA CAAACGGTTG CATTCACCCT TIGIACTATA ACACCGCTTC TGCATTCGCC ATATCCGTTT TTTAACCTTTT TTGTCTCCCG GGAACTTCTC ATTCGATTAT NATGTCTTCT GATGA

## SEQ ID NO:2164: (Length of Sequence = 296 Nucleotides)

ATGITTGIAA ATCACITCCI TITCCIACAA TATTICIAAT AAGAAAGCIT ATAACAGCAC TITATIGACA CCCTOGGACC CGGGGCAGGGG TCAGCAAGAC TCCCAGCTGG CATCAGACGG TGTCIGGCCI GCTGTCGCCA TCCCTGAGGG GIGCAGGACA GAGCCCCATA GGGCAGAGAG GCCCCCCTGG GACCAGAGGA GGATGCTGTG CAGCCAGGCC CATCCCCAGC ACTCGAGGCC TAGGAGAGA GGTGGGGAGA GGTGGGGAGA GGTGAGAGAC CAGGCC

# SEO ID NO:2165: (Length of Sequence = 310 Nucleotides)

GITTITICIA TGITTITCAA ATAATGITIT TCIGIGIGIG TTITITINCT TITTITIGGAC AGGNICICAT TCCCATTGCC CAGGIGGAG TGCAGTGGGG CGACACACC CTCACTGCCG CTTGACTTCC CAGGITCAGA TGATTCINCC ATCTCAGCCT CCCCAGIACACC TGGGATTACA GGCACACACC ATCATGCCCG GCTAATTITT TGTATTTTTA GCAGAGACGG GGTTTTGCCA TGGACTCAG GCTGGTCCG AACTCCTGGG CTCAAGAGAT CCGCCTGCCT TGGCCTCCCA AAGTGTTGGG

# SEQ ID NO:2166: (Length of Sequence = 361 Nucleotides)

GATGGAAACT GGAAAAAAA TAATTIGIAA GCAACAATTI TAGATTITIT TATGGAGGAT AGAGACATTI GAATCAGATA
CCAAGAAATG TATAGTAATC ACTCACATAG AAAGATGICT AAAATGGAT TIAAATGGGA TCGGGGAAAG CAAGGTGCTG
AACAACATGC TGTACATACT ACTTATAAAT CAAAGCAAAC CACTAGCAAA CTGATGICAG TACTAACACA GGTGGAAGTG
GGATTGTGGC GGAGGGGAGA GGTAGTNAGG GTAGACTTAT TTGTACCATT TINATTITTIG ATATTICTTT TATATACAGA
TACATAAGTC TGTATATACA TGTATGTCCA ATTATCTCCT T

## SEO ID NO:2167: (Length of Sequence = 325 Nucleotides)

TCCIGGGCTG TGCTCTGTTT GAAGGGGGGG CCCTGCTCCC CTCAGATCAG TCAGGAGGAA GATGACTAAG GGGAGGGATC CTCTGGGTGA TGGCCTCTTC CTCCTCAGGG ACCTCTGACT GCTCTGGGCC AAAGAATCTC TTGTTTCTTC TCCGAGCCCC AGGGGGGGT GATTCAGCCC TGCCCAACCT GATTCTNATG ACTGCGGATG CTGTGACCGA CCCAAGGGGC AAATAGGGTC CCAGGGTCCA GGGAGGGGG CCTGCTGAGC ACTTCCGCCC CTCACCCTGN CCAGCCCCTG CCATGAGCTC TGGGCTGGGT CTCCG

# SEO ID NO:2168: (Length of Sequence = 348 Nucleotides)

GERGAACCET TOGOGGAGGA AAGGOGAACT AGTGTTOGGA TOGOCCACCAA CTGOGGGAGC CTCTTGCAGG ATAAACAGCA
GCTAGAGGAG CTGGCACGGC AGGCCGTGGA CCGGGCCCTG GCTGAGGGAG TATTGCTGAG GACCTCACAG GAGCCCACTT
CCTCGGAGGT GGTGAGCTAT GCCCCATTCA CGCTCTTCCC CTCACTGGTC CCCAGTGCCC TGCTGGAGCA AGCCTATGCT
GTGCAGATGG ACTTCAACCT GCTAGTGGAT GCTGTCAGCC AGAACNGNTG CCTTCCTGGA GCAAANTCTT TINCAGCACC
ATCAAACAGG ATGACTTTTA CCGCTCGT

## SEO ID NO:2169: (Length of Sequence = 392 Nucleotides)

ATTITUTER GGICCAGITI GGGIGGCAGA AACIAAGACA CIGAGCIGAI GAGAGAACIT GIIGCITITC GCCCIGCGCA
TITATTIATT TATTIATITA TITATTITIG TATTITIAGI AGAGACAGAG TITCACCAIG TIGGCCAGGC TGGICTCAAA
CICCIGACCI CAAAIGAICC ACCCACCICG GCCICCCAAA GIGCIGGGAT TACAAGIGIG AGCCACCAIG CCCGCCCACC

-;-

TGTTGCATCT TTAACAGCTG TGTTTGGAAA AGGGTGAGGA ATTGATTCAT CAATATTCAA TACTAAGCTG CAAAATCAGG AATGCAGCCA ATTGGTTTAA TTGATCAAGG CTTATAAACT CTTAAGGGAC TCTAGTGAAC TGATACAAAC TA

### SEQ ID NO:2170: (Length of Sequence = 273 Nucleotides)

GTIGITGTIG ATGCTGTIGI TGTTGCTTTC TGTTTGTTTT TCTTGCAATG GTCAGGTCCC ACTCTGAACT CCGGGGGGCA
CCAACCTGAT GCCAGTAGGA TTGCCCTTGT ATAGGGTGTC TGACAACCCC TGTTGAGGGT CTCACCCTGT TGGGTGGCAC
ATGGAATAGG ACCCATTTAA TGAAGCACTT TNTCCCTTGG TGGAGGTAGT GTGCTTTNCT GGGGAAAAAC CCACTTGTCT
GGGCTGCCTG GATTCCTCAG AACTACCAGG AGG

### SEO ID NO:2171: (Length of Sequence = 357 Mucleotides)

GTGATGTACC CCAGCACTAG GGAATGATGT GAGTAAGACC TAATCCCTGC TCTCAGGGAG CTTATAGCCT ATGCCAGCAG
CAACACTAGT AAAAATTTAC TACTITGATA GGIGCACATC TTCCTTTGGT CAGCAATTTT CTCAAAACCA CTGTAACATT
TTACTAAAAAT GCTAAGCTTT GATTGTTTTT CAACTACTTC TTGAGAGTTT CTGCATGTAT GATAAGGGCA AGACATTACA
CTGAGGTATT GATGCTGATG AGCAGCAAGG CTCACTGGCT GGTGAAGGGA TACTGATTAG CACACCAATG TGCTGCTCTT
GAACACACAC CTCCACAAAA TTACAAATTA TCTTCCA

### SEO ID NO:2172: (Length of Sequence = 381 Nucleotides)

GAAGAAGGCC CATGGAGCTA AGGCCTCAGA ACACCAAAGT CTGGACTGTC TGAGGGCACA TGCTAATAAC AGGAGGCTGG
CAAAGTGGCC AGCTCCCATG CCTTTGCATG CATTINICTT TACCTCCTGC TGCCTGGGAA CATCCTTCCA GGAGCAATCG
AGTCAACAGC ACCACAGACA CTGCTATTCC GTTGAGAAAA GTTTTATATG GAAACACATA CTGATCATGA ACACAATAAA
CAGGGAGGGA AGCTCGGGCT CAGCCAGGAA ACCTGCCACA AGGAGAGTGT TTGGAACTAT CCAGGAGTAG TGTCAAACAC
TAACACCATA TTTACAAGTC TAATTTGGAA CCTGGGCCCT TTTTAAGTGC AGGAGGAAGT T

### SEQ ID NO:2173: (Length of Sequence = 351 Nucleotides)

GAAGTICCGG GAGCGCCTGA AGGAGCTCGT GGTCCCCAAG CACGTCATGG ATGTTGTGGA CGAGGAGCTG AGCAAGCTGG
GCCTGCTGGA CAACCACTCC TCGGAGTTCA ATGTCACCCG CAACTACCTA GACTGGCTCA CGTCCATCCC TTGGGGCAAG
TACAGCAACG AGAACCTGGA CCTNGCGCGG GCACAGGCAG TGCTGGAGGA AGACCACTAC GGCATNGAGG ACGTCAAGAA
ACGCATCCTG GAGTTCATTG CCGTTAGCCA GCTCCGCGGC TCCACCCAGG GCAAGATCCT CTGCTTCTAT GGGCCCCCCT
GCGGTGGGTA AGACCAGCAT TGCTCTGGTC C

#### SEQ ID NO:2174: (Length of Sequence = 308 Nucleotides)

TCATTAAATA GCTTCTATGC CACACTCTGA TTAAGCCGAC TGAGGTCCCT GGGATCTGGG TCACTGGACC GAGCTGCTCG CTCGGTGGCT CCACTGCCAG GTCCGGGCGC GCTCCCCACA GCGCTCAGTT CTGGCCCAGA CAGGGCCTGA CATCCGCCGC CTGCAGTCCC GGGGTGGCCG TCACCGTTCC ACGGCCAGNG ACTCTNCCTG CTCGTCCGGG AAGGCGATGT CGAAGATCTC CCGGTAGTNT TCCACGAAGG TAACCTCCAG GGCCCTCGGT GATGAAGGCT TCCAGGTCGT AGAAGTCC

#### SEO ID NO:2175: (Length of Sequence = 403 Nucleotides)

CTTGCCCAAG GGCCTGAGCT GGTGGAGGCA GAGCAGGAGT TGGATCCAGG CCTGTNTGAG GCATCCTGCC ACCTCCATCC AGACCTGGAG CAATCCCTGA GAAGGGTGGC TACCACCAGA GATGTGGCAG CTCTGGTCTC AGGAAGCATA GCCGGAGGAT GTCCCAGGCA ACCAAACAGC CATTCATCAG TAAGGAGCCA GAGTNAGGGC TGCTAGTTCA GCCCCCGGAA GGTGGTCCAG GGGCAGCCAG TNCAGAACTC AGCAGGAGCT CAGTTCCAAC TGAGCCTGAT TTCACTCCAG TGTCCACAAG GGACATCCTG

ACCIGGAGET CCTCGGCTAC TCACCCTGGG GCCTNCTTGC ACAGCCCAGG AGCTAGCCCA GGGCTGCCTC TAAATGGTTC
CCG

SEQ ID NO:2176: (Length of Sequence = 399 Nucleotides)

AGGCAACTAT TGAGGGAAGA GGCAGAAAAA GGAAAAAGGA ATGTACGTAA GGCAATTTIN CTTAAAAGTA CAATAAGCTT
AATAGTGTTT TAGGAAGACA AGATAAAAAT TACTCAAGGC TAGCTTGGTT CTCACTGAAT AAAAACAAAG GACTAAATAC
TGAGCTCCTT CTGTGTGGAT CTAATAATCA ATGCCTTGGT CGCTATATTG GTAATCTCTG GGGTAGTCAT CCTGGTACTC
GCCATGATAC TCATCAGGGT ATTCTGCCTG ATAATCACTA TCACTGATTT CCGAACCATT TGTTCCTGTT CCTTGGCTTC
CGTTGTGAAT GACAGGTTCT GTAGGAGCAG CACAGTATTT GGGGATCATA TACTTGCCCON CCAAGGCCAT ACAAACTCA

SEQ ID NO:2177: (Length of Sequence = 302 Nucleotides)

GGITTITATA AAAATCAGAA TITTICAAAT GCATTOGICA TITTCAGATG CATTOGICAC ATTICATTAT TCCATATCAA
AAAACIGCAT TIGITAATGI CACACAAATC TCATTGGAAA GGICTICAAG TATTGIGAAG TIGICCAGGI CACAAAGATG
AATGCTAGIT TITCAAAATT CTACTITITA CTIGAATGCI CAAATCTTAT AATTGGTAAC CCGGICAGIT TITCITTAGI
TGATAGGCIT ACTGCTTITA TGIGTTGAGA ATACTTGICT GTGAAACATC CAAATCTGGA AG

SEO ID NO:2178: (Length of Sequence = 343 Nucleotides)

GGTTTCACTC TCCTTGCCCA GGCTGGAGGA GCAATGTCAT GATCTTGGCT CACTGCAACC TTCTCCCTTC CAGGCTCAAT

CAATTCTCCT GCCTCAGCCT CCCGAGCAGC TGGGACTACA GGTGCGTGCC ACCATGCGCA NIAGGTTTT TTTTTGTAGA

GACAGGGTTT TGCCATGTTG CCCAGGTTGG TCTCCAACTC CTGAGCTCAA GINATCTGCC TGANGTGCTG GGATTATAGG

TGINAGCCAC CACATCCAGC CTCCTTTTAA TGTTTTGTTG ATTATTTATA GTGAAAGATT TAAATTCCTT TCTATTTCCT

TGTGGTATAT ATTCTATAGG CTA

SEQ ID NO:2179: (Length of Sequence = 377 Nucleotides)

AGATCATCAG GAATTAGATT CTCATAAGGA ACACACAACC TAGACCCCTC AGAGGIGCAG TTCACAGIAG GGITCATGCT
CCTATGAGAA CCTAATGITG CAGCIGATCT GACAGGAGGC AGAGCTCAGC TGGIAATGCT CACTCACCTG CTGCTCACCT
CTTTCTGTGT AGCTCGGCTC CTAATAGACC TGTATGTGTC CATGGTCTGC GAGTTGGGGA CCCCTGCAGG AAGTCTTGTA
AATGCATGTC AGGAAACTTA CTGTTTACAG CCACATAGTT TGTAGTAGTA AGGAAACTAG GACAATTCAA ATATTCATCA
MGGGGAAAAC TGGGGATAAAT TGTGGGTCAA TTTCATATGT TTCATACAGG AAAAAAG

SEQ ID NO:2180: (Length of Sequence = 195 Nucleotides)

GATATTIGCT TITCTCAGAA CCATAATCGA TACAAGATGC AGTGACCAAT TCATTCCTTA AAACACCTGG GCTCCTTAAG CGGCTAGAAG ACACAAGTTA CATCCAGCCC ATCAGGGAGC CAGAGGGNGA GGGGTCCCCA GCCAAGCTCT GGNCAGGCCT GCCATGGGGC AGNCCCTGAC CGTNCAGCCA GAGGT

SEO ID NO:2181: (Length of Sequence = 244 Nucleotides)

TTGGGTGGGA ACGGGCCCGG AGCGGGAGGA ACGTGACTICC CCAGAGGGAA GATGGGCATC ATACTGGGCC CAGAGCTGGG
AAGGAGTTGC TGCCAGCACA GGGTGGGCCT GGACTCCCCT CGCCCCTACC CCCAGTGGTT GTGGCTGTAG CCCTAAGCCT
GGAGAGCAGG ACCGGCCCGG GGTGTNTNEN AGGCTGCCAG GTGCCTCCCA GAGCTCCCAA GGGCCCCCAC CTGCAAGTNC
CAGC

SEQ ID NO:2182: (Length of Sequence = 287 Nucleotides)

CTCCTTGAGT CTGTTGACAC GTCACATGGT CAAAGTCTCC TCATTTCAGC CAGTCTCAAC ACAAAACACC CAACAGGGAT GCACTCAACT TGTTGGTTCC ATGTGGAACT AGGTGGCAGG GCGAGAGGGA AAGTAGTAGA AGGGGGCCTAT GGTGTGTCTG CATTCAGTCC CCTCACATAA AGCCACATGG ATCTAGGGGG GTATCCAAGA GCTCTGGTGG GGTCCGTGTT GCACCTAAGA CATTATAGGT CAGAGCAAGT TGCTCAGAGG GTTCCAGGCA GGGGGCT

## SEQ ID NO:2183: (Length of Sequence = 389 Nucleotides)

GATCCAGAGA GGGCTCCAGG TGGAGTCCCT TTTTCTGCAT AAGGGGCTGT GACCGAAGCA CAGAGGGGAA AAAAAAAAGT GGTGGGAGCC TCCTCTGGTT TCACCTGAAG AGGGAGGTGG AAGGGCCTGA AAATTAGATT TINITTATAA ATAATAGATA TTATAGGIAT ATTINCATAT TTITACATAA TGATGCCAAC CACAAACAAT GGACCATAAA GCACTGACCT CAGAATGATC AATTGCAAAA TGTTTAAACC CTGGGAAGCT TTTGCTTAGG AGGCCGGATA TTCTGTGTTG ATGTTATTCT ATAGCCATAA ACTICCCTGA ATTINCTGCT AATGTATCCA AGTCCAGGGA AGTCACTTAA AACTCTTCAA ATGCAGCTT

## SEQ ID NO:2184: (Length of Sequence = 383 Nucleotides)

GCAAGAGAAG CGGTTTGGGT CTCTGAAGGA AAGGCCAAAA CCCAGAACAA AGAAGAATCC TATGACTTCT CCAAATCCTA TGAATATAAG TCAAACCCCT CTGCCGTTGC TGGTAATGAA ACTCCTGGGG CATCTACCAA AGGTTATCCT CCTCCTGTTG CAGCAAAACC TACCTTTGGG CGGTCTATAC TGAAGCCCTC CACTCCCATC CCTCCTCAAG AGGGTGAGGA GGTGGGAGAG AGCAGTGAGG AGCAAGATAA TGCTCCCAAA TCAATCCTGG GGCAAAGTCA AAATATTTGA GGAAGATGGN TCCACAAGGC CAGGITACAG AGGAATGCAA GGAGCITCCA GGGAAGCACA GAATTCCAAG TTTTCGGAAA TTT

# SEO ID NO:2185: (Length of Sequence = 359 Nucleotides)

CTTTAATTCA CATCACAGCA GTCAAGGAAG TGGGGAAAAGG GGAAAAAAAT CAAGTGGCAG ATATTTACAT CTAAAATTCA CATTACTIGI TEGATITIGA ACATECTACO ACAATATATA CAGTAAAATA COTOTIGGGA CAATEGIACA AATTITGITT CCTTTAACTT TGCTTTTCTG GTACAGGTAA GATCATTTTT AAATCACTTT TTTNCTTTAA ACATGAATAC ACAAAAGAAA TOGITAGAAG TITCCITGIT TTAAATAAGC ACAGAATGCG GGAGGITAAA AACACATTTA TAGIGCIGAA TACCAATTGG NCATCACACT CTATACATTT TTTGCTCAAA TTCCTGTAC

### SEO ID NO:2186: (Length of Sequence = 337 Nucleotides)

ATAGTTATAC TCAGTGAAAT TAACAAGACC CAAAGGTGGT ATTGTCTAGG AATAAAAGGG ATAATTTTTG TTGTTCACAA AAGTAACTTG TCTAGCACCA CACATCAGAA AAACACAAAA ATAGCACACT CTAGTTCTAA ACAGCTATGT CTAAAATAGA TTATATAGTA AAACCGGTAT TATACAGCAT ATTGTGGATT TGATAAACAG ATAAATATTT GCNCTGAGTA GGCTGTTTAT AATATAACAT TINCTTATCI ATACAGAATG AAAGCCAAAA AGTTAACTGT ATAGAGATGT GCAGAACAAC ATTAAATATT ATGGCTCAAA AGCAGGG

### SEO ID NO:2187: (Length of Sequence = 329 Nucleotides)

GCATTINTCA GCACAGATAG AGCCCTGTCC CTCCACCTAG TGCCCACTCC ATGACTGTTA ATAATAACAA TAATAATAAA ACTACTGGCC AAGCACGGTG GCTCATGCCT GTAATCCCAT CACTTTGGGA GGTCGAGGTG GGCAGATCAC CTGGCCCAAC GCCACCGCCT CTAGCTCCGG GCTCCCTGAG GTCCCCAGTG CCCTNNCCGG TCCCACGGCT CCCACGNTGC CACCCTGTCC TGACTOGOCA COTGGTOTTG TGGGCAGACT GOTGATOGAG TTCACCTCAC CCATGCCCCT GGAGGCGGGT GCAGAGGGAG AACCCAGGC

SEQ ID NO:2188: (Length of Sequence = 335 Nucleorides)

GECCCCAGCT CCTCTTCCTG CCTCININAT GGCTTGGGCT GGAGTGGGCT CTCTGGACCT GACCGGGGT CAGACTGTGG
GTCCCTGCGT CTCCTGCCCA CTCINACCGG GCTTCCTCCC TCCACGCTTA GGGTCTGTCC CGGGTACTCA GTCAGGCCCAG
TGGGATCTTA CCCACTTCCC TGCAAGGTGC ACCTGCCCCA GGCTCAGGCT GCCCAGCGGC TCTTCCTGGA CAGTAAGAGC
AGGGCTGGGC GCCTCTTTCC TGGCCCGGAA GCCGCAGGGG CCCCTCCTCC AGAGCCTNGG CGCAAGGAAC ACAAGGCTGC
CGCTGCTCTT CCAGG

### SEO ID NO:2189: (Length of Sequence = 366 Nucleotides)

AACTOGTIGGA TCAGATOGAN TTCTACTTT CINATGAAAA CCTGGAGAAG GAOGCCTTTT TGCTAAAACA CGTGAGGAGG
AACAAGCTGG GATATGTGAG CNITAAGCTA CTCACATCCT TCAAAAAGGT GAAACATCTT ACACGGGACT GGAGAACCAC
AGCACATGCT TTGAAGTATT CAGTGGTCCT TGAGTTGAAT GAGGACCACC GGAAGGTGAG GGAGGACCAC CCCCGTCCCA
CTGTTCCCCA ACGAGAACCT CCCCAGCAAG ATGCTCCTGG TCTATGATCT CTACTTGTCT CCTAAGCTGT GGGCTCTGGC
CACCCCCCAG AAGGAATGGA AGGGTGCAAG AGAAGGTGAT GGAACA

# SEO ID NO:2190: (Length of Sequence = 333 Mucleotides)

CTGCGATCCA GCCTAGGCAA CAGAGTTGAG ACCCTATCTC AAAACAAACA AAACAGCCAG GCACGGTGGC TCATGCCTGT

AATCCCAGCA CTTTGGGAGG TCGAGGTGGG GGGATCACCT GAGGTCCGGA GTTCGAGACC AGACTGACCA ACATGGAGAA

AGCCCATCTC TACTAAAAAAT ACAATATTAG GGGGCGTGGT GGTGCATGCC TGTAATCCCA GCTATTTGGG AGGCTGAGGC

AGGAGAATCG CTTGAACCTG GGAGGCGGAG GTTGCAGTGA GCCATGATTG AGCCATTGCA CTACAGCCTG GGCAAGAGCA

AAACTCCGTC TTC

# SEO ID NO:2191: (Length of Sequence = 284 Nucleotides)

AAGITIATAA AAGITIGATI ACTOGAAAAG ITOGATCIAA TICAGAAATI TCAGGCCAAA TGAAACAGCC CCTTCAAGCA
AACATGCCIT CAATCICICG AGGCAGACA ATGATTCATA TTCCAGGNGT TCGAAATAGC TCCTCAAGTA CAAGICCTGT
TTCTAAAAAA GGCCCACCCC TTAAGACTCC AGCCTCCAAA AGCCCTAGTG AAGGTCAAAC AGCCACCANT TCTCCTAGAG
GAGCCAAGCC ATCTGTGAAA TCAGAATTAA GCCCTGTTGC CAGG

### SEO ID NO:2192: (Length of Sequence = 260 Nucleotides)

ATGACGACG CTACCTCGAG GTCATTGGCT TCACCATGAC GTNGTTGGCC GCGCTGCAGG TGGGCGGACCA CGGCGAGCGG
. CTGACGCAGT GTCGCGAGGT GGTGCTCACC ACATCCAAGG CCATCCCGGT GCAGGTGGAT GGCGAGCCCT GCAAGCTTTC
AGCCTCACGC ATCCGCATCG CCCTGCGCAA CCAGGNCACC ATGGTGCAGA AGGCCAAGNG GCGGAGCGCC NTCCCCCTTG
CACAGCGACC AGCAGCCGGT

# SEQ ID NO:2193: (Length of Sequence = 247 Nucleotides)

GETCTCASCA CTOCCTGGGT GACCOGOGG AGCAGGCAAA GEAGGGCTCC CAAGTCCGTT CTGCAGCACT GGGGCAGGGA ACAGACCCAG GNTCCTGGGA ATCCTCTTCT GCCTAGCTTT GCCTGCCTGC CAGAGCAGGG CCTGCGGTTT GGGTNCTGTN ACCNTCCGGG GGCGGGGGAA GGGCAAGGNA GGCGGATCTC TGAAGTCCCG CCCAACTTCG CTNCTGATCC CCCAAGGTCA GAGAGGG

## SEO ID NO:2194: (Length of Sequence = 399 Nucleotides)

CCICCATCIC CCGGGITCAA GCGAITCICG TACCICAGCC TCACAAGIAG CIGGGAITAT AGGIGICCGC CACCACACCI AGCIAATITI TGCAITGITA GCAGAGAIGA GGITTCGCCA GGITGGCCAG GCIGGTCITG AACTCCIGAC CICAAGIGAT CCACCCACCI TIGITGGCCI CCCAAAGIGC TGGAATTACA GGCAACAIGI AGCCITTGAG TCTAGCTTCI TCCACTAGCC

TAATTCATTT GAGATTCCAC TCGATTCTAC TTGAGATTCA TCCACATTGT TGAATGCACA TTCTTTTTTA TTTGTTCTGT
AGCATTCTGT TGTGCAGCTG TGCCCCAGTT TGTTTANCTA TTCACTCTCA GTTGTTTCCA GTTTTAATGA CAACTTCAG

SEO ID NO:2195: (Length of Sequence = 172 Nucleotides)

TCAAAGTCAG CTTCTTGACC TGCAGGGCTT CAATTTGTGG CTGACAGTTT TAACTCAGAA AATCCCTGAC TTGATTGGCT ACATAAATNA TATGTNATAT AGCCATTAAG ATCATGGTTT TGGAAAGTAT TTTAATGATA CAGGAATGTG CTCTGAAATA ATAAGTGGGA CT

SEQ ID\_NO:2196: (Length of Sequence = 398 Nucleotides)

GCAAAAAAAA AAATTATTAT CTCCACTITA CCAGTGCTGA CACTTCACCA ATGTAGGGCT CTCAGTGACT AGCCCAGGGT
CATGCACAGC CTGTTTCAGC AGCTACCTTG GACTTGAACC CAGCTCGGTC TGTCTGACTC AATGCCTATA GTCTTAACCT
TTCCAGCAGC TGCTTCTTTG TCAAACAGGT CCTCCCGCAG GTTTTCACAG CCCAGCCCCT TACTCAACAA GTATTTATTG
ACAGGCCTCA GGAACACTAG GCAAGTAGGA TAGCAATGAA CAAGATGCTG ACCTTGACCT TGACCCTGCA TCCATAGTAT
GAGCATTTTA ACTGGGGGAG GGTTTGCAAA GTTCTCTTAA ACAGTCTACT ACATGCTCTG TAAGCATTTT CTTATGGG

SEQ ID NO:2197: (Length of Sequence = 313 Nucleotides)

GTCCCTTGTG CATTGAGTGC ATCCCCGCTG GTGACTAAGC TCGCAGCAAG CGGCTACCCC CCGATCTGCA AAAGGGCCTC TCCCTTTGTG TTCTATACAT TGTGAATCTT CCCGTCTGAA GAACGCCCAG CCTGCCCAGA CAAAGCCCCG CCTTNCCCAA AGCAGAGGGG CTGTCTGTGT CTCCAGAAAG GGGACATCGG GGGGGAGGGG GGCTCAGAAA GGAGAAGGGC TGTGATCTCC GGTCCCTTCC CCCATCATCC TTCCTTAGAC TGATGCTTTG ACTGAATCAT CACTAGCTAT GGGCATTAAA AGG

SEO ID NO:2198: (Length of Sequence = 360 Nucleotides)

GETCTCACTA TGTTGCCCAG GCTGGTCTCA AACTCCTGTT CTCAAGCGAT CCTCCTGCCT CGGNCTACCA AGGTGCTGAG
GTTACAGGCG TGAGCACTGC ACCTGGCTAG GAAACTNAGT TTTTTCAGTG GTAGAGGCTC CTAGCCAGTG GCCAAGGGAA
AGAGAGAGTT CTGGGTTCAG GGGCTGGCAG GAAGTCAGCA AGACACCAGG GACTCGGCTC CACTGGCTGG ATCTCAGGGA
AGAGCAACTG CCACAGTGGG GACCTGGAAC ACAAAGGGAA ACTGAGGCAG CAGCTGCACC ACAGTTTACA AGTAGAAAGA
CCATGCTTGA GGACAACAGA AGTTTCACTA AGGATGCACG

SEO ID NO:2199: (Length of Sequence = 374 Nucleotides)

TTTTGGGTAG TACCCITGCC CTCTTCATGG CCACTTCAAA GTGAAGCCAG CAAAGTGATA ATACTTTATC ATTTAGTATT
ATCATAAAGT ATTAATACTT TGTCATAAAG TCCTCCTTGA GCCCAGGGAC CATGGAAGTC AGCTAGAAGA GCCCTGAGCA
AGGAGCAAGG ACTTGGGCTT CTCCACGCTT TGCTCCTGGC TTGTTTGACC TTGACTCATT CCCCATATGT CTTTGAGGAG
GCTCACAAAA TACTAAAGCT GGGAGGAAAC TTGGAGATCT ATAGGTCAAA CCTCCCCATT GGGCTGATGA GAAAATACAC
GCAGGCCTAG CATGGTGCCT GCCACCATGG TGGGATCCAG TATGGTTTTA TAAA

SEO ID NO:2200: (Length of Sequence = 416 Nucleotides)

CTACTAAAAA TACAAAAATT AGCCAGGCGT GGTGGTGGGC ACCTGAAATC CCTACTCAGG AGGCTGAGGC AGAGAATCGC.
TTGAACCTGG GAGGCAGAGG TTGCAGTGAG CCGAGATCGT GCCACTGCAC TTCAGCCTGG GTGACAGAGC GAGACTCCAT
CTCAAAAACAA AACAAGCAAA CAAACAACAA CAACAAAAAA TACCTCTTGA CTTCTAAAGA CGCAAAAGTG GCCAAAAGTG
CAATACAGTA TTGTGTTTAT TTACATCTAT TTTAAATGCA TGTGTATCTG TAAATNCAAA GTGATTCGTG ACTCATTGTC

TOCTCAGTCT ATAGCATTAT TAACTTTCTA GGAGCAGCAG TGGAGTAGAG TGGTACTGAA TTGGTCACAG ACTTCATCCG ATTATCAGGA TCCTGG

SEO ID NO:2201: (Length of Sequence = 315 Nucleotides)

GAAACCAATA TAAATTICAA AATAAACCAG CATACAGACC AATIGCAATT TATAGAAAAA ATAAAAATGT AGAAACATCA
CCICCICICC CCGACCCCAG TACIGAAATT ATACITCCIC AGACATACIG CCCCATCACT GGGAAGGGIG CGGACAGATT
GGGIACATIT ATAGANIAIT AAATAATTAA GIAACAGAGG CACCGITTIT GCATGIATGG TCCCAAAGAC TITICAACTT
NITTITCAAC ATTACAGITG TTAAGAATGG AAATIGAAGG AATIGTACAT ATTITCACTG GCAGTITCIT ACAGA

SEO ID NO:2202: (Length of Sequence = 328 Nucleotides)

GCICIGICAC TCAGCCIGGA GIGCAGIGGI GIGATCICGG CTCACIGCAA CCTCIGIGIC GCAGGITCAA GCAATICICA
TGCCICAGGC TCCTGAGIAG CIGGGATIAC AAGCAIGCGC CACCAIGCCC AGCIAATITI TGIATITITIA GIAGATACAG
GGITTCGCCI TCCTGACCIC AAGCIATCCA CICGICITGG TCTCTCTCAG TTCTGGGAIT ACAGGIATGA GCCACCAIGC
CTGGCCGGAA TATATATATT TTTTACCACT CTATTTCCAG TGCCTAGACT AAAACCCAGC ACATGGIACA CGICATACAT
AAGGAAGG

SEO ID NO:2203: (Length of Sequence = 268 Nucleotides)

ATTTIGICGI CGICGCICAT GCCACCACTG GGACCNACGG GGT: CGGG AGIGGTTTIT CIGGCTIGIT TCAGCCTTTT
CAGGCTCTCT TCCATCTTCT TCACAGAGIT TAATACATCT GACACGGTT CATAGTACTT ATGAGTGCTT TCACTGAGAG
TGCCTTCTAG CCACTGCTGA ATTATTGCTT GTTTGAGCTT ATCCTTGTGT CCGCTCTGAA GCTGGAATAA GGGCTTCANA
GCACTGTCCA CATAGGAGGA AGCTTTGG

SEO ID NO:2204: (Length of Sequence = 353 Nucleotides)

SEO ID NO:2205: (Length of Sequence = 265 Nucleotides)

GITTCACCAT GITGGCCAGG CIGGICTCAA ATTICINACC TCAGGIGATC CACCCCICCT CAGCCTCCCA AAGIGITGGG
ACTACAGGCG TGAGTCACTG CGCCCAGCCG TGGITTITIT TITTITAGAAA CAGTGITTTG CCATGCTGCC CAGGCTGGTC
TCAAATCCAT AGGTTCAAGT GATCTCCCCA CCTCAGCCTC CCAAAGTGTC GGGACCACAG GCATGAGCCA CCATGCTTGG
CCAGAAAGAA GITGTTAACA AAATG

SEO ID NO:2206: (Length of Sequence = 340 Nucleotides)

GCAAAGCTIA TITTITCAGI TGIGGGCTCT AGITTGGITG GGAAACTATI TCCTTAGACC TGGGTCACCC CTCGGGCTCC CTTAATCTCC CGCCATATGI TCTCCAGAAT CAGGGCATGG TGITTGCCCC TGGTGCGACT CAGGCCAGGIT GCTTTGCACA GACTCTGGGC CAGGGCAGGACT TGCCAGGACT TTATCTGTGG CGCTCAGTAT GGTGCATAGIT GTAGACACGT GCCCTAGGTG GTGTTTAATT GATCTGGGTA AGACTCAGNC AAGGCAGGGC ACAGTGGCTC ACGTCTATAA TCCCAGCACT TTGGGAGGCT

SEQ ID NO:2207: (Length of Sequence = 348 Nucleotides)

GIGITIGITI CICTITICAC CATAATIGIA AGCITICCIAA GGCCTCCCCA GCCCTGTGGA ATTGTGGATC AATTAAACCT CTGTCCTTTA TAAATAACCC AGTCTGAGGC AGTTCTTAT AGCAGCGTGA GAATGGACTA ATACACCTCC CTTCTTGAGT CTGGAAGAAT ATGTGAAGGG AGATTGCTAA GGACTTATTT ACAGAATGGT TCTTAAAGTG CTTGGGCAAG AACTATGTAT TINTGGAGGC TGGTAGTGTT TCAGTGAATC TGAAAACCTT TGTGACATGT GAGAAAGGTA TGCTGTCTCT GAAAGCTAAG TGTATTATGA AGGACTATA AAGGGCCA

SEQ ID NO:2208: (Length of Sequence = 154 Nucleotides)

GAATCCTGCT GTGCACATTG CTTCAGATGG CTAATTATAT CTTTGGACTG TTTGTACAAC CATTGACAAA TATACTTACT TTCATTTCTG CTAATGCAAC TGAAAAGAGC ATTCTGTAAA TTGAAGAAAA ACAAATAAAC AGNAATTAAC AACC

SEQ ID NO:2209: (Length of Sequence = 352 Nucleotides)

GAGGITCAGA ATCCTCCATC CAGCATCITC CCIGGICACA TGGICCCAAC CITITGCTCC ACCCCCITCT CIGITCCCCC CGCAGTCCAT GCCCAGCCA TCCTGACTCT GTCCCTGGAT TTCTGGCTTA CTGACACCTG AGCCTGTGCA CAGGNCCTCC CTTCTGTATA GAGCACGCTT CCCATCTTGT GGACTTGCTT CCCATCTTGT GGACTCGGAG GGTTCCGAGC AGCCGTTGAG GTGANGCTCC TATGACACCT CCNCCGTGAA GCCTNCCTCA CTTTTCCATT ACCAGTGAGG CCTGCCACAG CCTGATTTGT ACTCTGATCC TGGCACGCAT GGAAGCCATC TT

SEO ID NO: 2210: (Length of Sequence = 338 Nucleotides)

GTCTTTCCAT CAAGAGTCAA TGTATATGCA AATATAGACT TAAGAACATA AGCATCCTGG TTTAATGTTG TTGTGAGCCC
TGTGGAAATA AAATTAAACT CAGTGAATGT TTACAAATCA ATACATAGTA ATCCTATATA TGAAAGCTAA GATGTATAAG
ATGTTTATAA ATTTNCTATT AGAAAATACT GCTTTCTTAA AGGTGATTTT AAAAAGCTAG CTGATATCTG ATGGCTCAAG
CATCCAGAAA ATGTATGCAA TGATAAGNCA TTGACTAGGA TGAACAGAAA AGGGATACAG GAAAAGTCCG AACACATGAA
ATTCTAAATT AACCAAGA

SEQ ID NO:2211: (Length of Sequence = 353 Nucleotides)

GTTCCTGGAG TACCCTCTTC CCCCAACCCC AGACCTGCTT TCAGAGCAAA ACTCAAGTCC CTCTTCCTCC GTGAAGCTTC
TCCCTCAGCT GAGCAGTGAT CACTTACTCA CTCTTAACCC CAATCCGCTG ACTGGGTGGG GACAGCACGT CCAGCCTTCC
CACCTCTCCT GCAGGCTTCT AGACGGAGTT TCAAAAAACTG ATGAGCCTCG ATCCAGGGCT TGAAAGAAGC CAGGGTGTAA
TCTTGTTCAT GCATGCNTCC CCAGAGNCTC GCCCAGTGCC TGGNACATAG TAGGCACTCA ATAAATGCTG AATGAGTGAA
TAGTTGAATG ATAGGTGCTC AATAAATGAA TGA

SEQ ID NO:2212: (Length of Sequence = 293 Nucleotides)

GAGAAAGGAG GCAATCICAG TCTCGGTCTC CAAAAAGGGA TACTACTAGG GAAAGCAGAA GATCTGAATC ACTGTCCCCA AGAAGAGAAA CTTCTAGAGA GAACAAAAGA TCTCAGCCAA GAGTGAAAGA TTCTTCCCCA GGAGAAAAAT CCAGGTCCCA GAGCAGAGAA CGAGAAAGTG ATAGAGATGG GCAGAGGAGA GAGAGAGAAA GGAGANCCAG AAAGTGGTCT AGGTCCAGAT CTCATTCTAG GTCCCCCTCA AGATGTAGAC CAAAAAGTAA GAGTTCATCA TTT

SEO ID NO:2213: (Length of Sequence = 423 Nucleotides)

NATTAACACC ACAGIGATAA ACAACTITAA GCTTATGITT CTTTATAGAT CACTGGCTCA CACATAATTC AAAACCCACA CAGAAGCTAA GAGTCTTTAC ATTAAATATA TTCTTCCTAA AAATCCTTAC TGTATGCATC TGTCCTCAAG CAGTAAAATT TGATTATGCA CCATTTTATA ATTAATATGT CACATTTACA TAGCAAAATA ATGAAGGCAC AGCTAATACA AGCAAACTTA

AACCCITICT ACITCIGAGC TOGGGGIAGG GGCACACACT TGGGATTOGT TCITCAAGIA TATATTITIN CCAAACATTA
GCTTCAGIGA AGAGITCIGG AIGATTITCA CAGCTACACC CCTAAAAGCT ACATGGACAG AAAGACGTCA CAAGGCGCAA
GGIACATAAC GGIGGGIACA TAT

### SEO ID NO:2214: (Length of Sequence = 259 Nucleotides)

GICATGGAGA TOCACAGCAA GIACINGOGC TGCCIGCAGG ANCAACCTCC ACAGCGGGGC GITCTCTGAT CGAGGCTCAG
ACTITCGAGA ACGAAGAAGC CGAGACGGIC ACCGCCATGG CCTCGCINTC CGTGGGCGIN AAGCCCGCCG AAAAGAGACC
AGATGAGGAG CCCATGGAAG AGGAGCCGCC CCTNTAGCAC TNCCTCGAAG NTGCTGTTCT CTTGTCTGTC
TTTAAGCTCA GCCAAGAAA

### SEO ID NO:2215: (Length of Sequence = 378 Nucleotides)

CACACATCCT CACCCCACAG AAACTGCTGG ACACACTGAA GAAACTGAAT AAAACAGATG AAGAAATAAG CAGTTAAAAA
AATAAGTCGC CCCTCCAAAA CACGNCCCCA TCCCACAGCG CTCCGCAGCT TCCCACCACC GCCCGCCTCA GTTCCTTTGC
GTCTGTTGCC TCCCCAGCCC TGCACGCCCT GGCTGGCACT GTTGCCGCTG CATTCTCGTG TTCAGTGATG CCCTCTTCTT
GTTTGAANCA AAAGAAAATA ATGCATTGTG TTTTTTTTAAA AAGAGGTATC TTAATACATN GTATCCTAAA AAGAGGAGCT
CATGTGGCAA TTGGTGCACA GCAGGAGGAA ATTTCTTGGG ACTINITTAG GNTGAATT

#### SEO ID NO:2216: (Length of Sequence = 428 Nucleotides)

GAACCCACAC TGGGGAGAA CCATATGAAT GTAAGGAATG TGGGAAAGCC TTCAATTATT CCAACTCATT TCAGATACAT GGAAGAACTC ACACTGGAGA GAAACCCTAT GTATGTAAGG AATGTGGGAA AGCCTTCACT CAGTACTOG GCCTTAGTAT GCATGTACAG TCTCACAGTG GAGACAAGCC CTATGAATGT AAGGAATGTG GGAAATCCTT CCTTACATCC TCACGCCTTA TTCAACATAT AAGAACTCAC ACTGGAGAGA AGCCTTTTGT ATGTGTTGAA TGTGGGAAAG CCTTTGCAGT TTCCTCAAAT CTTAGTGGGC ATTTNAGCNA CTCACACTGN AGGAGGAAGG CCTCTGAAGT NINAGATATG TGGGGNAAGT ATTTTGGGCN ATCCCCCCCAT GTCTTTAATA ATCCCCCAT

### SEQ ID NO:2217: (Length of Sequence = 408 Nucleotides)

GICATCAGAG TICATCGIGA ACACCCIGAA IGCCGGCICG GGGGCCTIGI CIGICACCAI TGATGGCCCC TCCAAGGIGC AGCIGGACIA TCGGGAGINI CCIGAGGGCC ATGIGGICAC TIATACTCCC ATGGCCCCIG GCAACIACCT CATIGCCATC AAGIACGGIG GCCCCAGCA CATCGIGGGC AGCCCCITCA AGGCCAAGGI CACIGGICG AGGCTITICC GGAGGACACA GCITINACGN NACATCCACG GITCITIGIG GGAGACININ TACCAAGGICC TICCTIAAAG CCGGGGGCTI TCAGGITACA AGNITCCATI CCCCAAAGGIT TNITCCICAA AATNNCCAGC AAAAGGIGGG TIGACINGNG GGCCCCINGG GNITITCCCCA GGGCTITIC

### SEQ ID NO:2218: (Length of Sequence = 316 Nucleotides)

TTTACAGAAT ATAGCITTAT TTATAGAATC TTACAAATAA AACATTTACA GTCCACATAA GITAATTINC TTTTCTAATT
TCTTCTCATA CACCIGAGIT ATITAAAAAA ATACIGIGAT GGAACTGCAG AACIGIAAAG GGAAATAAGA ACAATAAAAT
CCTAACCTCT CTTGCAAAAA TCAGACAACT TTGTTTTAAA GTAGATGCCC AGCATATTGC CATCTCTTTG GAAGAGGACT
TACTATACTC AGCTCTTACG NTACCCAAAC AGAGAAGCCT TCTTTTTAAA ACCCAAGGIT AAGGGCCCAG TGAAGG

#### SEQ ID NO:2219: (Length of Sequence = 319 Nucleotides)

GECTTOCTET COCACAACTT TOTCACGETE GCGCCTGGAC ACAGCAGCCA CCACAGTCCA GGCCTGCAGG GCAGGGTGTG ACCCTGCCGG GGCAGCCACC CCTCCCTGAG AAGAAGCGGG CCTCGGAGGG GGATCGTTCT TTGGGCTCAG TCTCTCCCTC CTCCAGIGGC TTCTCCAGCC CGCACAGCGG GGAGCACCAT CAGTATCCCC TTCCCAAATN TCCTTCCCGA CTTTTCCAAG GCTTCAGAAG CGGCCTCACC TCTNGCCAGA TAGTCCAGGT GATAAACTTT GTGATCGTGA AATTTTGTTC AAGACACTT

### SEO ID NO:2220: (Length of Sequence = 343 Nucleotides)

CTGGCTAACA TGGTGAAATC CCGTCTCTAC TAAAAGTACA AAAAATTAGC TGGGCGTGGT GGTGGGCACC TGTAGCCCCA
GCTACTTGGG AGGCTGAGGC AGGAGAATGG CGTGAGGCAA CAGTGCAGCC TGGGCAACAG TGCACCTCCT CCATCTCTAC
CAGCGTCCCC TCCAGTCTGC ACGGGGCAGT CCTCCTGGGC TTGACCTCTC TGTACCCACA GCTGGGGGCC AGGCAGCCCC
CCTCTATCCC TCCCAGCACC TACTACATCG NCCTNCACAT CCCTGATTCC TGTTGTTATG GGAAACTNIT NCCAGAGATG
GAGGTTCTCT CGGAGTATCT CGG

# SEO ID NO:2221: (Length of Sequence = 373 Nucleotides)

CTCTGTCTCC CAGCCCGGAG TGCAGTAGCG CAATCTTAGC TCACTGCAGT TTTGACCTCC CAGGCTCAAA TAATCCTCCC GCCTCAGCCT CCTAAGTAGC CGAGACCACA GCTGTGCGCC ACGACATCTA GCCAATTATT TGTTTTTTGT AGAGATGAGG TCTCACTGTG TTGCTCAGGC TGGGTAGGTG TCTAACTCCT AGGCTCAAGT GATCCTCCCA CCCCAGNCTC CCAAAGTGCT GGGACTACAG GCGTGAGTCA CCGCGCCTGG CTTTGTTTAA GGCATTCTTT TTCCGCAGCA TCTGTTACCA GCAGCCTGAA GNCATTICTA TAAACAATTA TCANGGAAGA CACATGGGNC AGAGACCCTA AAT

## SEQ ID NO:2222: (Length of Sequence = 197 Nucleotides)

GICTOCTGIA ATTOCCCCAA ACCGGITCTI GAGGATGIGA AACCAACITA TIGGGCTCAA TCCCATITGG TCACAGGATA CIGIACGIAT CINCCTITCC AGAGATITGA TATCACCCAG ACACCGCCAG CATACATAAA CGIGITACCA GGITIGCCCC AGIACACCAG CATATATACA CCCTTGGCCA GCCTTTC

#### SEO ID NO:2223: (Length of Sequence = 280 Nucleotides)

TTITITITIT GCATTITIAG TAGAGACGGG GTITCACTGI GITAGCCAGG ATGGICTCAA TCTCCTGACC TCGTGATCCA
CCTGCCTCAG CCTCCCAAAG TGCTGGGATT ACAGGCATGA GCCACTGCGC CCGGCCAACT TTITGCATGI TTTCTTTAAA
ATTTCTCTAC TTITAATTGI ACTTCTAATA CAGACACTTC TGAAATCAGI TTTCACATTG CTGCAGCCTT ACCAATTTGI
AGANACTGIT TATGTGATGI TTTGATTCTT CATTTATATA

# SEQ ID NO:2224: (Length of Sequence = 388 Nucleotides)

GATIGCAGGC ATGAACCACT GCGCCCAGTC GAGTGGTAAT ATTITGAAAG GAAACCTTT TCTGAGCAGG TCTCAAAAGA GAGGTTAAAA TACTGAGTAG ACCATGCTGT AAACAGATGT GCTGTTATTC GGGCTTTGAT ATTCCATTTA TAAAGCACAG GCAGAGCTCA GAGTAGATTT AATGTAACTC TGAAGGGCAC TAGGATTTIN AGAATGGTAA ATAAGCATTG GCTTCAACTT AAATTCAAAT CTGCATTGGC TTGTAATAAG AGACTAGCTT GTTACTGAAG CTTTNAAGCC AGTTGTTTTC TCCTATCTAG CTAGGAAAGT CCTAGATGGT ATCTACTTCC AATAAAAGGC TGTTCTGGCC AGGCGCGGTG GCTCACGC

## SEO ID NO:2225: (Length of Sequence = 420 Nucleotides)

GETCEAGGAG CCTGGGCCGG GCCGGGCGGG GACTACTCCG GAGTCAGGAG GCAGCAGAGG CGGAGGACGA GGATCTCTGG CAGTCAGCGC CGCTCGGACG CCGCCGCAC CATGGGCTGC TGCACCGGAC GCTGCTCGCT CATCTGCCTC TGCGCGCTGC AGTTGGTCTC AGCATTAGAG AGGCAGATCT TTGACTTCCT TGGTTTCCAG TGGGCGCCCTA TTCTTGGAAA TTTTCTACAC ATAATAGTTG TCATATTGGG TTTGTTTGGG ACCATTCAGT ACAGACCTCG ATACATAATG GTGGACACCG ATCTAATGAC ATTCAATATC TCTGTACATC GGTCATGGTG GAGAGAACAT GGGGCCTGGT TGTNTCAAGA AGAGTGCTGC CTTCCCTCAA GCCCCATGGC ANNGATGGAC

SEQ ID NO:2226: (Length of Sequence = 264 Nucleotides)

GIACCIGCIC CCIGCOGGCA CCITINITIGG IGGATATITIA GCIGCOCTCI ACAGIGGITA TAACATIGAA CAGATCATGI ACCIAGGCIC GGGTITIGINC IGIGIOGGIG CCITIGGCIGG CCICTOCACC CAGGGAACAG CACGICTIGG CAATGCACTG GCCATGATG GGGTIGCTGG AGGACTGGCA GCCACCCTCG GAGTCCTAAA ACCGGGCCCA GAATTACTAG CTCAGATGIC IGGAGCGATG GCTITGGGIG GTAC

SEO ID NO:2227: (Length of Sequence = 402 Nucleotides)

AGAGGATTGG GGCACTGGGG CAGGGGCGCT GGCACATTCC TCAGATTCTG GCATGTCATC CTGGAAGTAC TCAGCCTGGC
GGTACTGCCA CAGACGCAGG TTCCCGTCCC ACGAACTGCT GACAATCTTC TCTTCAAAGG GGTGCCAACT GACGTCACGC
ACACAGGCCT TGTGGTTGGT CAGCTTCTTC ACAATGTGGC CACTTAGAAG GTCGTACACA ACCACTTTGC CAGTGGAGCA
GCCACTGTAG ATGAACTGCT GGCCAGTGCT ATGAATGGGG GAGAACCGGC AGCGGATGAG GGTGTGCAGC ACTCCGTGGC
CCCGGTAGGT CATCAAGGAG CTGTCCCCTG GGAGCTTCAG TTTCCGCCAG GCTTTTTTNG GGCACTTTCT GCCACCGATA
GT

SEO ID NO:2228: (Length of Sequence = 394 Nucleotides)

TITIAAAGIGG AAACAATGIT TITIAAGAGGI GATATAAAGA AATGCCCCCA CTGTAATCCC TACCATATGI TGATICTATG
TGGTGGGAGG GAGGGGAGAA TGATTCCTIT TICTIAGAATC AGAGAATTIG GAAAGTATCA AGAAAGATAA TAACAGAAAG
CATGAAATAG AGTIGTGCTT TGAAGATGAA TITCTTACTG TITCTTAGGAC CTAGGCAGCA TITCTTCCAT GTCTGCAACA
ACATAAGAAA CAACAGCCCA AACAGCAGCA GCAACATTCA TCTGCTTTGG ATCCCATGGA CAGTCATGGT GTCT

SEQ ID NO:2229: (Length of Sequence = 342 Nucleotides)

TTTTTTTTAG GATGATTGAG TGTTTCTTTA AAAATAAAAA CCCCACAAAA AAGCCAGAAC ACCCTACCCA ACCCAGCCCA GTGTAACAGG TTAGCCATTA ACACAGAATA AAGAAGGTCC CAGCCACACA CGTCATTACT CGGCAGAGGG TGTCCAGCCT GGTCGGCCGA CGTCACAGGG GATGGCCCTG CGTGGCTGGG ACACAGACAG GGAGCAGGCA TGGCACCTGC GCCACGCAGA GCAGCAAGACGC TGAGCATGAC CACTGGAAAT AAATAAACAT GGTGCCGACA GCATCTTTGA ATTAGTAAGA CGTTAGCACA AAACAAAAAAA GCACAAACGAC TG

SEQ ID NO:2230: (Length of Sequence = 357 Nucleotides)

GIGGAATGCA GCCATCACAC AGIAGTITCT GAGATIGCIT CCGICTAGGI TITATGGGAA GATATITCCI TITCTACCAT
AGGCITCAAG GCGCTCTAAT ATCCGCTTGG AAATACTACA AAAACAGTGI TICAAAACTG CICTATCAAA AGGAAGGATC
CACACTGTGA GITGAATTCA CACATCACAA AGAAATCTCT GAGAATTCTT CTGTCTGGGI TITATAGGAAG AAATCCCGTT
TCCAAACGAAG GCCTCAAAGC GGTCCATATA TCCACTTGCA GATTCTACAG AAACAATGTT TCCAAACTGC TCTATCAAGA
GGAATGTTGC ACTCGGTGAG TTGAATGCAC ACATCAC

SEQ ID NO:2231: (Length of Sequence = 304 Nucleotides)

AAGAGACGAG GICTCACTIT NINGGCCAGG TIGGICICAA ACCCCIGGIC ACAAACAATC CICCAGCCTC ANCCICCCAA
AGIGCIGGCA TIACAAGCAT GAGCCACCAT GCCCAGCTIA AGGGGGATAT TITIATAGAG CATCIIGCCC TGGITCIGGA
AITCICIGIA GATAATACAG TIAACAGATA TICCCCIAAG TGATTAAGAA CCITICCATT TGACTGATIT INCAGAAAAG
TITIACCTATG TAACCTCAGT GGGTAGCACA AIGCCIGACA CATCITIGNA GCTCAAATGT CICT

SEQ ID NO:2232: (Length of Sequence = 354 Nucleotides)

CCTGCCACTG AGGCAGGTGC GGCCCCAGGA CCATCACCAG GAATGCNAGG CCACCCTGGA CCAGAGGTAG GAGCCCAAGG
TCCGGCCCTT GCTCTTGAT TGTGGGCAGC CTCCTGCCCT CTCTGGGTCT CAGTTGCCCC ATCTGCAGAG CGAGGAGGCC
CGGGCTGGTT GGTCTTGAAG GCCCTTTTCC ATGCCGACAT CATGTCACTC TAGGCCTGGG GTTCAGTTTC CTGTGGCTGG
TGATGCTGTG GTTAAGTTTG CTTGACCCCA GCAGCCCGAG GGACTGTCTG AGTCACAGCA CAGCCCCTAT TGCGTGGCTG
CTGGTGTGTG GGGTCAATTC CAGCAGATGA ATGT

## SEQ ID NO:2233: (Length of Sequence = 414 Nucleotides)

CCCAAAGCCC GCACGATGCA GGCCACTINCG ATTOCACCAA GATGGACTGT GTGTGGAGCA ACTGGAAAAG TCAGGCTATT
GACCTGTTGT ATTGGCGGGA CATCAAGCAG ACGGGCATCG TGTTTGGGAG TTTCCTGCTG CTGCTCTTCT CCCTGACCCA
GTTCAGCGTG GTGAGCGTCG TGGCCTACCT GGCCCTGGCC GCACTCTCAG CCACCATCAG TTTCCGCATC TACAAGTCTG
TTTTACAAGC AGTGCAGAAA ACCGACGAAG GCCACCCTTT CAAGGCCTAC TTGGAGCTTG AGATCANCCT TTCTCAGGAG
CAGATTCAGA AGTACACGGA CTTGCCTGCA GTTCTACGTG AACAGCACAC TTAAGGAACT NAGGAGGCTC TTCCTTGTCC
AGGACCTGGT GGAT

#### SEQ ID NO:2234: (Length of Sequence = 394 Nucleotides)

ATAATCCGAG TGCTCCATCT TCAGIGCCAT CTGGACTCCC ACCAAGIGCA ACACCCINCA NIGIGCCTTT TGGACCAGCA CCAACAGGAA TGTATCCCTC CGIGCCTCCC ACCGGACCAC CTCCAGGACC CCCAAGCACCC TTTCCTCCTT CCGGACCATC ATGTCCCCCA NCIGGIGGTC CTTATCCAGC CCCAACTGIG CCGGGCCCTG GCCCCACAGG GCATATCCTA CACCAAATAT GCCCTTINCA GAGCTACCCA GACCATATGG TGCACCCACA GATCCAGCTG CAGNIGNICC TTTAGGTCCA TGGGGATCCA TGTTTTNTGG ACCCTTGGGC GNCAGGAATN GGAGGGCAGT ATCCTACCCN GTAATATGGC NATATNCATN TNCA

### SEQ ID NO:2235: (Length of Sequence = 376 Nucleotides)

CTGATATGAT GACAATAAAG GAGTATGCTG CTGCTGTTCC GCTTTGCGTC CTCGCTACAA ACGCCTGGTG GACAACATAT
TCCCTGAAGA TCCAAAAGAT GGCCTTGTGA AAACTGATAT GGAGAAATTG ACATTTTATG CAGTATCTGC TCCAGAGAAA
CTGGATCGAA TTGGTTCTTA CCTGGCAGAA AGGTTGAGCA GGGATGTTGT CAGACATCGT TCTGGGTATG TTTTGATTGC
TATGGAGGCA CTGGACCAAC TTCTCATGGC TTGCCATTCT CAAAGCATTA AGCCATTTGT AGAAAGCTTT CTTCATATGG
TGGCAAAGCT GCTGGAATCG GGGGAACCAA AGCTTCAAGT TCTTGGAACA AATTCT

# SEQ ID NO:2236: (Length of Sequence = 399 Nucleotides)

TOGCAAGAAC ACTGAAACCC AGCCAACTTC TCCTCAGCTA GOGACCAAAA CCTTTTTGTC TGTAGTCCTT CCGAGGTTGG
AGACTCTTCT GCAGCCAAGG AAAAGGTCGC GGAGACATGC GGAGACTCCG AGGTGGAGGA GGAGTCCCCA GGAAAGCGCC
TGGACGCAGG TCTCACCAAC GGCTTTGGGG GTGCGAGGAG CGAGCAGGAG CCGGGCGGGG GCCTNGGGAG GAAGGCCACA
CCCCGACGAC GCTGTGCCTC CGAGTCCAGC ATCTCCTTCA GCAACAGCCC GCTCTGCAGA TCGAGCTTTA ATGCGCCCAA
ATNTGGGCGG GGCCAAACCG GCTCTTGTGC GACGGCACAC GCTTGGAGGA CCNCAGTNAG CTGATCTTCT GCATCGAGA

## SEQ ID NO:2237: (Length of Sequence = 234 Nucleotides)

AAANTACTAA CATTITTAAT ACAGICTGAT CAGATCAATT CACATCACAA GGICAACCNG GGCITGCTCA CATGIGNCAC
AACIGAGGNA CACAATGTCC CTACCTGCCG GCTGTCCCAC CTTCCTGGIT CCCAACAGCA TTGAAACCCC CTACTTCCCT
GACCAGACTG GCATTITTTA AAATTTTGCA TAAAACTATT TCTTCCATAG NCTTCAAACA ATCAACTAGC CAAG

#### SEO ID NO:2238: (Length of Sequence = 369 Nucleotides)

ATTTAAGCT GIACTTAACT AATTTGGCT GAGGATGAAT ATATCAGCCA CAGCACATTA AAGAATGAGC CAACCATTIG
TCATGGTTGG TCACTTTTTA AAGTATTGA TTACTGCAAC TGGAGAATGA AAAGTGTATA TTGGTGACGC CAACCTCAGT
TTCTGAGCAC TCCTGCTCTG TGGTGAGAAT CAGACAAAAA TTCATCGGGG TGAAAAAAAA AAGGCATTAC CTGATTCACA
CCCTTGTCTT GCTAGCCCTC TTCCATTCAT TTCTCACACA GCACTTTGCT CTGTTAAATC CTCTCTCTGT CTCAGACCAT
TGCTTGCCCC TTCAAAGGGT ATGGTTCAGG CTCCTTTCAA GACATTTGG

#### SEO ID NO:2239: (Length of Sequence = 399 Nucleotides)

TTAATATAAT ATTCAAGTCT AGCATTIGCT ATTTACAACA AATAAATATT GCCCCTCCCC AATCAGTAAA CAAACATTTT
TTTTTTCTTT TTGCTTTTTA TACAAATATT CAATCACCCC ACCCCCACCC CAAATCCTCC TTCCTCACTA ACCCCCGTCT
TGCATGGTCT CGTAAAGCCC AGGACGCAGT GGTGAATGGC ACTTGCAGTG GCATGAGATT CAACATCGAT GGGACTCAGC
TGGGACTGTC CTCACTCACC GGGTGCAGAG TCTGGTCCAT GAAGAGGGCT TCTNTCTCTG CTCCCAGGGG AGGGCTGGGG
TAAGCGGTGG GTGAGACTCC CTCACTCTCA GTTGGNCCTG ATGATGGAAT CTTTNGTGCA GCCTGAGAAA GGCTAGAGT

#### SEO ID NO:2240: (Length of Sequence = 388 Nucleotides)

TTITCAGAAT TCATCTCIGA CITTAATGGC TTAAGCAAGA ACATGGTITC CGTGGCTCCC CCTGGACTGA ATGCTGGAGG
ATATATACTT CACAGTCTGA GGCCTGGTCC CAGGAACTGC AATCTAACAG GATGGCAAGT GGTTTTGAAA CATATAGATT
TTCAGGATGG AAGTTTGATT CITCAGATTG TGACTCATCC GTGGAAAATA AATGGTTTAG CACCTAAATC TGTATATTCC
CATCAGTGGC TTGGCTGACT CAGTTGTAAA TAGGGTACCC TCCATCTGTC TCCCACCCAT ATGCTCCACT GTCCCCAGGG
CCTCAGTGCC TGANCCCTAG GGGGATTCGA GTTGGCTGCT GGATTCATTT CCTGCAAGCA GGCCTGCA

## <u>SEQ ID NO:2241:</u> (Length of Sequence = 377 Nucleotides)

CTCCATTTE TCCTAGTTAC TTITAAGGTA TAAGCTGAAG TCATGATTT GAGATGTTTC TNCTTTTCTA ATATAGGTGT
TTAATGGTAC ATATTTCTCC CTAAGTACTG CTTTAGTGGC ATCCTGCAAA TTCTGACATA CTGTGGTTCA TTTTAATTCA
TTACAAAAATA CTTCTTAATT TCCCTTTTGA TTTCCTCTTT AATTCATGGG TTACTTAGAA TTGTGTTATT TAATTTNCAA
GTACTTGGCG ATTTATCTCT CTCTGTTATT CATGTCTAAT TTAATCCCAG TGTGGTCTGA GAATATATTT NGATATCAAT
AAAGCTACTC CAGCTACCTT TTGATTAATG TTATCACAGT ATATCTTTTT CTATCCT

# SEQ ID NO:2242: (Length of Sequence = 381 Nucleotides)

CCCACATTAA CCAAACACA ACACACATGA CAAACTCTAA GTCTCCAGAC AGACACCCTC AAATAGGCAC TTGGTGTTTT
CAGCTGGGGG CTGGAGAGAT CTGGGGCTTT GGCCTCCAAA GGNAGGAGCT GCTGTCCCCA GAGAGGAGAC AACAGCTTCT
GGAGGCTCTG GGGACTCATT GGATGGGTAC TGGCATGGTA GATGGGAAGG GGGCCTGTTT AAAGAAGACC CCCCACCCCC
ACTGCCCATT TCACCACAAC AGTGACTTGC TGGAAGTTTT GTGCCCTGCG GATTTCTGAA TATAGTGGAC AGGCATTTCT
AAAGAGCGCA TCACTGAAGG GGCAGAGGCT NGCCTTTAAA TGTGGGCTTT GCATGTTTTG G

### SEO ID NO:2243: (Length of Sequence = 359 Nucleotides)

ACCATTIATT AAATCAGACT GITATICITA ACAGITATGI AAGITACATG TATGITTAAG TCAGAGIATI TCACATGGAA
AAGITITITAA CICCIATAGG CAAGCAAAAT CATATCACAC AATATATAAG TGGGAAGGGG ATACIGCIAA ACATTCAAAT
AAGGCAAGIA TATAAAACCA ATAAAACAAT AATGAAAAAA TICAAGCATI CCTITAAGAG AAATGAACAC TACAAGCTAA
ATGIACITIC TGAGIGIATI CGIATAATCA AGGCAGIGIT TCTCCTITTA AAACATCAGG AAATGGAATA AGGCTCATTA
GIAGATACAG CIGCCCICAA GATTTCAAIT TCAGITIGC

SEQ ID NO:2244: (Length of Sequence = 362 Nucleotides)

ATATGTACTA CATTIGGIGG AATACGCAIG TACAATICIT CAAAAATAGI AAAGAGCAAA ACAAACAAAA AATAGTAGAA GCACTGGAGA AATACACTAT GGCATAAACT AGTTACGGGI GGGATGTCAC ATGGACCATA TCTACACTCT GIGGCAACCT TCTTACCTGA CTCCAAAGGA TCAGATAATC AAACAGGAAA TTATGGTAGG AAATCAGAAA ATTGAAGTAT GCATTCATAT CCTAAGCAIT TTATTTTAGC TCAAAATATA AAATATTCAT CAGITTAGCCA AGCTTTGGGA TGAGAGATCA TAGCCTCCTC TTTGATAGGN GITTCTTGTT TTCTTGATTT CATGITTCAG AG

## SEQ ID NO:2245: (Length of Sequence = 333 Nucleotides)

AAGGATCTGA GCGAGTTCAG TGTCATTGTG GGCAACGGGG AGATTAAGCT GCCAGTGGAG ATCAGTGGGG CCATCGAGGA
GGAGTTCACT GTGGCCCGAC TCTACATCAG CAAAATCAAA TCAGAAGTCA AGTCTGTGGT CAAGCGGTGC CGGCAGCTGG
AGAACCTCCA GGTGGAGTINT CACCGCAAGA TGGAAGTINAC CGGGCGGGAG CTCTCATCCT NCCAGCTCCT CATCTCTCAG
CATGAGGCCA AGATCCGCTC GCTTACGGAA TACATGCAGA GCGTGGAGCT AAAGAAGCGG CACCTGGAAG AGTCCTATGA
CTCCTTGAGC GAT

#### SEO ID NO:2246: (Length of Sequence = 347 Nucleotides)

AAACTAGCTT TGGTGGGAAC TCCCTCACCC CTGCTCCCCA CAGGAAGGCA TTAATCTATT TATGAGGGAT CTACCTGCTA
TAACCCAAAC ACCCACCAG CCCCCATCTC CCAACACCAC CACACTGGGG ATTAAATTTC AATGTGGGAT TTGGAGAGGA
CAAATATCCA AACCATAGCA GTCTTAAAGT ATTTAAATTA GAATTTAAAT TAAAATTTAA ATTACAGTAT TTAAATTAGA
ATCATTTGTG GAGTTTCTAA AAGGTATGCA TTCCTAGGCC CCTCTCAAGT TAGATTTATG GACACTGATC CCCAGTCTGG
AATTTTAAAA CAGCAAAATC TCATACT

## SEO ID NO:2247: (Length of Sequence = 357 Nucleotides)

CACAGGACAT GCTCCGTCAG CACAAGCACT CCCAAGTCAA TCTGAAAAGC AGGCAGCAGC ATTGCAGGGG ACAGGTCCTC CCCTGATCTG GGTGGTGGTC TTCTCCCACT TAAAGCACTA TATACAGGGG GAGGTCCCAG GCTGGACATC TTTACCAGGG GCTGGGAGAA AGCAGGCCGT GCTCTGTGGT CTCAGAGTCT TCCTGGCGCT CTTTGGAACC TGACAGAACA TGACCTCAGT CCCAGGCCAGC GAGTGGCAGA GAGGACTTTG TACTTGGCTG CAATAAAAACA TGCCCTTCTT CGCAGAGACA CGAACAATCT CGTCTCTACC AGAGGCCTGT GAGACATCAG CTCAGGA

#### SEQ ID NO:2248: (Length of Sequence = 327 Nucleotides)

TTCTCTTTAT TAATGGCTAG AAAGTCAGGT TCACCCAAGG AAGTCACTGA GGGGCCACAG CATTGAAGGG TATGGGGTTT
GGAGAGATAG GAGCAGGACC CACCACTCAC GTCCAGAACC CAGGGGGCAC ACCTGGTCCA AGAGGTGGAG GCATTGGTCA
CTGGAGTCAC GAGGGTCAGG ACAGGCACTG AGAGGCTGAG GGAGTNTCGG TCCGGAGGGA GGCAGTCACG GGCTAGGGCT
GGGAGTCGTA GCCAGTNTGC AGGGCCTGGG AGCCCCAGGG CTGATGCCCT GGGCTGGCGT AGTACTCCAC CACCTGCCGT
GGCACCT

## SEQ\_ID\_NO:2249: (Length of Sequence = 404 Nucleotides)

ATTITIANTI TAGGITTGIT TITATTIAAGI TIAATGITAA TICCATGCTG TGITTCAGTA AGAACAATAC AGATTCTGTA
TCTGTGGCTC CAGTCAGATA TCCAGTAGTA CAAATTAGCT TCAAGTTACA CATACTGAAC AAAAGAGGTT GAGCGAGCGA
AGGAGGGGAG GAGTGAGGGG AAGGAGGTAG GGGGAGGGGG AAGGAGAAAA AACAAAAGNN TIGAACAGGC ATGCAGGCTT
TTCCATACCA CCTTCAACGC TAACCTGCTT CAGTGGGAGA GTAAAGTAGG CAAGANTGAG CAGCCACGGG ATTGTTGAAC
TGTTACCCAG CACCATGCTT TTCAGCAACA TTTTCAGCGG AGTTTGGGAA CATTTTTTTTA CCAGCAAAAA CCATTACACC
GAGT

SEQ ID NO:2250: (Length of Sequence = 275 Nucleotides)

TECCAAATAT ATATATCIGA ACATAGIGAA AAAGIAACAT TTAAAATCAG TCAAATTATT TTTAAAATTC CITTECTTAA
TAGCCATTAC TTACTCACCT TTIGTTTTIG TTTTINCCTT CAACTACTAG AGTACTGTAC TTTTGCTTTC ATTCCTTCTTA
TACATTCIGC CITCATCCTT AAATTGTTCA ACTCGATAGT GCTAATATTG GTAGATAATC TACGCTAGCT GCTGTTTCTT
GTACAGAAGT TGGTTGATAT CGCTGATTCA CITTT

SEO ID NO:2251: (Length of Sequence = 426 Nucleotides)

GEAATAAGGA GATGAGAGCA TECTCTGCCA ACTGGCTGGG ACCTGAATGT GCTAGGCAAG TNCCACTACA TCAGCTCAAG
AACATAAACA AAAATGTAAT TTAAAAAACA GATGGTTTAA AAAAATATCT GATAAAAATT ACCTATCCCT CTCCCTTGCT
GTGAAATAAT TTAAATAATT TATTCTAGAT GTAAAAATAA TAATACAAAA AAGTTTGTTC AAAGACACCT GTGTCCTGTT
TGTTAAGTGT GCAGTCTGGG TCCCTTGGGG TGGAGGGAGC TGGCCAAGGA ATGGCATTGT GCAGAGGCAT ACCGGGAAGC
TCTCTGGATG CAACCCCACC TCTACCGCTT GGCAGTCAAT GACCTTGGGC ATGATGTTTC TTCACTTCTC TGAGGGCTAG
GGCTTTGATT CTGAACATGG GGGGCT

SEO ID NO:2252: (Length of Sequence = 315 Nucleotides)

GAAAAGATAA ACAAAATTAA TAGACCATTA GTGAGATTAA CCAAGACAAC AGGAAAGAAG ATCTTAATAA GCTCAATTAG ACAAAGAATA CAAAAGATCA TTCAAGGCTA CTATGAACAC CTTCACGTGC ACAAAACTAGA AAACATAGAG GAGATGGATA AATTCCTGGA ATTTTAAGAN TAATACAATG GACTTTGGGG AATCAGGAGA AAGGGTAAGA GTGGGGTGAGG GGATAAAAGA CTACACATTG CATACAGTGT ACACTTCTTG GGTGATGGGT GCGCC

SEQ ID NO; 2253: (Length of Sequence = 335 Nucleotides)

AGATTIATTC TCATGTACAA AGCGGTCAGC CCACGGGACC ATATACGACA GTTGCACAGA GTCCTAGAAA AACGCATCIN
TCTAAAGGCA ACTCAGAAAG GTAAGGCAGG TGGACCCCCT CCCCCACCCC ACAACGCACA CAGAATGAAA CGGAGAAAAA
GAGAGAAGCC AGTGGCCGGG CTGACCCCAAG AGTCCCGGCC CTATGGGGTC TCCCAAGCCC CAGGGCACAG GTGGATATGG
CCTTGAAGAG AGAGCCCTGC CAGGGCTNAG GCCAGGTCTC TCACTGGCTG CAGGAATNGG TAAGGGGCTC AGGCCAAGGG
GAACACTTCA GGGGG

SEO ID NO:2254: (Length of Sequence = 380 Nucleotides)

GEARGECTCT GEAGAGGITC CTGCAGGATT ACTITIGATGG CAATCTGAAG AGATACCTGA AGTCTGAACC TATCCCAGAG
AGCAATGATG GECCTGTGAA GGTAGTGGTA GCAGAGAATT TTGATAAATA ATATACAATA ATCACATCCA CTTTCCACCA
CCTACACAAA AAACATTTCA TACAGACTGC AGTACAGTGA TITTTTTTTTA TGAACTAAAA GGTCAAAATT GTTTCATTTT
CTCTTCTGCA GATTCTAAGT AAAAAATGAC AAAATATGCA TAGAGATGTT TGTAAACCAA AAATAAATGT CTAGGGCCCCC
GAACCCATCT GAATGGGACC CCTCCTCTCA GCCAAGGGCA TTCCAAAATT AACCTGCAAA

SEO ID NO:2255: (Length of Sequence = 399 Nucleotides)

ATATAAAAAG TGTTTCTGTG ATTCTNCAGA GCCCAGGAGT CAGTGCTGGT GGTTGGAGGG ACCTGCCCCC ACTGGTTCAT
TTAACCCTCT GTCTCGGTGC CCTCAGAACC TCAGCCAGAA AGGCAAGGAG GAAATCAGAG CAGGAGCCTC ATACTCTTGG
TGATCTATTC ATTCTGTGAC CTCAGGGGTC ACATATAAGG TCAGTGTTTC TCGTCCCCGC CGGATCTGCA CTGCCAACTG
GGATTGGGTT CGAACAGCTT CATAAACATC TTCAGCATTT TGTACCATCT GCTCCCCAAT GGCCAAAAATC ACATCACCAG
GNCGCAGACC CAGCCCGGTG TGCAGGGGAG CCCAGGATGA CTTTATGGGA TGAGTACANC ATGCTGAACA TCGGGNAAG

SEO ID NO:2256: (Length of Sequence = 371 Nucleotides)

### SEO ID NO:2257: (Length of Sequence = 372 Nucleotides)

AACTCTATGG CACTAATGTA TGATGGATTC ATTTCCAGAC TGTCGGCCAC GGAAGCACTT CTTCATGGCC TCTGCCCTGG
ACAGCAGCCT GTCCTCGGG CTCCCCATGT TTTTACCAGC TTCTGCTGAG TTTCTACAAT CTTGAGCTCT GCTGAGAATT
CTTTTCCTTG AAATTCTTCT ACCTAAAGCC CCAGCCCCCA AAAGAGCATG TCTCAGGAAC TCATTATGCC CTGAGTCAAC
AAGAACTTGT TGATAAATGG CTTAAAAGTT TTTACAAGAA GTAACTTCCC TTGGTAAGGA GTAAATAATA GCTCTGGGAA
TTTTCCAGAT AAAACTATTT CATTTCTCTG GTCAGTGGCC CCATGGGGAA GG

### SEQ ID NO:2258: (Length of Sequence = 340 Nucleotides)

CTCAGCCTCC TGAGAACCTG GGATTGCAGC CTCCCGAGAA CCTGGGATTG CAGGCACCTG CTGCCATGCC CAGCGAAGAT
TTTGTATTTT TAGTGGAGAC GGGGTTTCAC CATGTTGGCC AGGCGGGTCT CAAACTCCTG ACCTCGTGAT CCACCCGCCT
TGGCCCCCCA AAGTGCTGGG ATTACAGGGG TGAGACACCA CGCTCGGCCT TTATATATAT TTTNAGAGAG GGGATTACAG
TTTNTTGCCC AGGCTGGTCT TGAACTCCTG GGCTCAAGCA ATCTTCCCGC CTCAGNCTCT CAAAGTGCTG GGGATTACAG
GCAATGAGCC NACCGTGNCC

### SEQ ID NO:2259: (Length of Sequence = 394 Nucleotides)

CCCCCCAGAT CCCACTGITA GGAGAACGCC TCTGCTAACA TITTCTCTAT CITGITATCC TCTGGGAATG AGACCCACTA
AAGGGCTAGA GTGTTGCTCA GTGTGAATTC CTCTTTCTCG ACTCCATCTT CGCGGTAGCT GGGACCGCCG TTCAGTCGCC
AATATGCAGC TCTTTGTCCG CGCCCAGGAG CTACACACCT TCGAGGTGAC CGGCCAGGAA ACGGTCGCCC AGATCAAGGC
TCATGTAGCC TCACTGGAGG GCATTGCCCC GGAAGATCAA GTCGTGCTCC TGGCAGGCGC GNCCCTGGGA GGATGAGGCC
ACTCTNGGCC AGTNCGGGGT GGAGGCCCTT ACTACCCTGG AAGTAGCAAG GCCGCATGCT TINGAGGTAA AGTC

### SEO ID NO:2260: (Length of Sequence = 359 Nucleotides)

TTTTTTTTT AGATCTGAGA TTCCTTTAAT CAGAAGCACG TGCGTCCCAC AGTGTGCTCT TCAAGCCCCA AAGGGCACGC CTCTAGGACT GCNTCCTTAG AGCGAGGCTC GGGCTCTTGG TAAAAAAGCA TTTGCTTGAT TTTATTTAAA CAATGGTGAA TCTTCAAGGT GCCAGTCTAC ATGCCCAACA GTCCTCCAGG NTTCAAGGAC ACAGTCACCG TCACTCAGAG ACTGCCTCAT TTNGCAAGAG AGAAAAACAG TGACCACCAC AGAGGGCAGG GAGTGACAAA GCTTGTAGGC TAATGCTGCA AAAGCCCCTA GAAACTGGGG GCCACACACA AGNGCCCCANC AGGTGCGCC

## SEQ ID NO:2261: (Length of Sequence = 360 Nucleotides)

TTTTTTTTT GAGACAGAGT CTCGCTCTGT CGCCAGGTTG GAATGCAGTG GTGTGATCTC AGCTCACTGC AACCTCCGCC
TCCCGGGTCC AAGCAATTCC TCTGCCTCAG CCTCCTGAGT TGCTGGGACC ACAGGGGCAC GCACCACGCC AGGCTAATTT
TTGTATTTTT AGTAGAGACG GGGTGTCACC ATATTGGCCA GGCTGGTCTC TTCGAAATCT TAAATCCAAA CATTTCTATT
CTTCTAGATC CCTTGCTCAG GCGAATCCTT TCATCTTTCC CTTATAGCTC ATCAGCATGT AAGTGTCTTG ACATCTCTCT
TCTCCTTCCC TATTAGCTCT CTACTCTCTN CANITACACG

SEQ ID NO:2262: (Length of Sequence = 348 Nucleotides)

CTGTCAAAAA TGTATTATAT CAATAATTT ATCAGCAGCA TTTAAGAAAT AAGAAATCAT TAGACAATAG AAGACAACCA
TGGTAATGCA GTCAGGCCAG CACACAATAC ACCGTTTTCA TCACACACTG TAACCTGAAT CCCTGGCAAT TTCCTAGAGG
TATTAACATC ATACCTTATT AAGAATTATT GGCCCCCNAGG AGTNGGGGGG TGGGGGGGTT GCAATCTGTC CAATCAACAT
CTGGCTCTTA CTTTCTCCCN GTAGTATTAC ATTTGTATAA TATTCTTATA GGAAACAACT CAACTCCATG TTTATAAAAG
CACCATACGG TNTTTCCATC CTGTACCA

SEQ ID NO:2263: (Length of Sequence = 352 Nucleotides)

CCCCAAAAGT TGACATGGTC AATGAAGAAA TAGGCAAACA GCAAAAAGTT GCAGTCATAC ACCAAATGAA AGAAGATCAA
AGCAAAATCC CTGAAGGAAT CCAAGTTGAC TCTGACGGC TAATCACCAT AACAACTCCC ANTAAACTTG CCACGCTCAG
TGTTCGAGCC ATGCCCCTTC CAGAAGAAGT CACCCAGNIT CTGGAAGAAA ATAGTGANIT GATTCGTTCT ATGGAGCAGT
TGACATCCTC TTTGAATNAG GGTGAAAAATA CTCACATGAT TCATCAGAAG ACCCNNGNGA AAATTINGGA ATTCAAAAGGA
AAACTTTNAG CAACANCTAA CAGGGNGNIG AT

SEQ ID NO:2264: (Length of Sequence = 381 Nucleotides)

GCTIACAGIC TAGAACAAGC TITTCCAGCC CACAGCCCAG GATGGCTITG AATGIGGCCC AACACAAATT CATAAACTIT
CCTAAAACAT TATGAGATCT TITTGTGATT TGTGTTTTAG TTCATCAGCT ATCATTAGTG TTAGTGTATT TTGTGTGTGG
CCCAAGATAA TTCTTCCAAT GTGGCCCAGG GAAGCAAAAA GATTGGACAC CCCTGGTCTA GAAGGAAAGG CAAATATTAA
ATAACCTCAG AAAGTGATAT TACAAATTGT GGTGAGTTAT AAACACACTA TCAGGTGTTA TAAAGGAAGT GAAGGAAGTG
GTGAGGAAAT TCTTATCAGG GNAGTGATAT TINANTGAAG GGCCTTAGGG GATGAGTAGG G

<u>SEQ ID NO:2265:</u> (Length of Sequence = 301 Nucleotides)

CACTCTTCCT CCATCCTGCC TTTCCACAGC AGTCAGTCTG GTCCAAGCCA CCATCATCTG TCACCCAGAC TACCATAGCC
ATCTCCTAAC TGGTCCTCCC ACTTGCCGTC TTTATTCTGC ACACAGCAGC CTGAGTTCAT ACACACAGGT GCATTCATTC
ATATTTTGCT TAAAACTGTT CAATGGCTTC CCATGGAACT TGGGAGTCTG GATATCTTCA CAAGTGTGTN GCATGGCCCA
GGACCAATCT GGACACCCCT NCCTGTTTGT NCATNCATGC CTTGCACCAC TNTTTGGCCT T

SEO ID NO:2266: (Length of Sequence = 360 Nucleotides)

COCCIGCATG CCCCACAACA ACACAACTT ATTCCTCTCC CAAACATCTG TCAGGCCTGG CCTTCCTGAG CAGGAGCTGA
GCAGGAACAG GCCCTGGCTG CCTCTCCTCT GCCACAGCTC TGACCTGGCC AAGGCTGGAA GCTGGCATCG TAATGGATGG
GGGAGTGGGT GGAGGATCTG AGGGTCCCCT GGGTAGGTTC CGATACCTTG GACAGGTGGG CCTCATCCTG ACTTAGAACT
CGGGGAGGGG CCACTCTTCC TTCCCCTTCT TCCAGCAGCA GCTCCACCAC CCTCCACCTT CTGTCCTCGA CATGTGTNCC
AGAAAACCCA GCCATGAGGG ACCGCTNTGA GGAAGGGTCT

SEQ ID NO:2267: (Length of Sequence = 391 Nucleotides)

GATGGAGTOT CECTOTOTCA COCAGGCTGG AGTGCAGTGG CAAAATCTCG GCTCCGGACC CCCCCAAGAC ACATATGACC
CACCACCCCA TCTCTGACCA TGAGGCCACC CTGAGGTGCT GGGCCCTGGG CTTCTACCCT GCGGAGATCA CACTGACCTG
GCAGCGGGAT GGGGAGGACC AGACCCAGGA CACGGAGCTC GTGGAGACCA GGCCTGCAGG GGATGGAACC TTCCAGAAGT
GGGCGGCTGT GGTGGTGCCT TCTGGAGAGG AGCAGAGATA CACCTGCCAT GTGCAGCATG AGGGTCTNCC CAAGNCCCTC
ACCCTGAGAA TGGGAGCTTG TCTTCCCAGC CCACCATTCC CCATCGTGGG CATNATTGCT GGNCTGGTTC T

SEO ID NO:2268: (Length of Sequence = 191 Nucleotides)

CTTTCCTCTC CTGTTCACAC AGTATTCGAT TATTTCAATG GCTACTTTCA GAGGATCAGC TAGAGGCTGA TGTGTTGTTT
CAATGGTTAT ATTATTTATG AACTGAGAGT AGAAGAAAAA TTTGAGAGACA GGTTTTTGGA AAAAATGAAT TTAGACAAAT
ATTTAGTAAC TGTATGATAT ATAACTCCCC N

SEO ID NO:2269: (Length of Sequence = 237 Nucleotides)

TAGAAGCATT TTITAAACAA CACTCAACTT TGTGAACCCC TGAAGATTTT TTGACCGTTC CAAGTCTTAA TGCCACACCA CTATTCCAGC GAATTTATGC TACAACTGGT AACAATGACC AGAAGCCTGA AGAATTAAAA TGCCAACACC AAACCTTTCC MTACCAGCTC TGGNCTATAT TGCTCCCATG CATTTAATAT ATTATMINGT TTTATANCCA CTTCTAAATA TTCTCAG

SEQ ID NO:2270: (Length of Sequence = 223 Nucleotides)

AAAGGITAAG GAATTICCIT TATTITITAC AAATTAAGAC TATGCAGATT TCATATATIT CIGAATCAAA AACACCITIG TCITCACAGI ATGAGITAGA ATGCAGCCIG AGCIGAAAAT CAAGAAACTA GAAAAGAAAG TGGTAGAGAT AACTATATTA AAAANCIGIT AGGIATTICC TITAAAAGIA GGIGTITIIT TITTITINCC NICITITITT TIT

SEO ID NO:2271: (Length of Sequence = 363 Nucleotides)

TTTGATGGGT GAGGCTGGTA GAGCCACTGG GAGAATGTGG GGCAGTGAGG GGAGGGACAT CTTCCTAGCA TCACCAGCAT
CCTGAGCTTT GICTTGTGTT GGGAGTCCCA CAAGGGCTGG TGCAAGGNIT AGCAGCTGCT ACTTGAACCC TAATCCCTGG
GTGGATGTGG TCTCTTGTAA CTTAAGAGCA AATGTTTGTN ATGACATGCA CGGGTGGGCA GAGGTTGAAA AGAACAGGGG
TCTACGGAGG AGCCAGGCCA GCCACGTGAG ACCCTTCTTT CTAAGTTGGC TTCTTGTCCA TTCCTGGGGA TTNGGGGAAA
GAACGACAGA ACTTACCTTC CATCTTCCTT CTCACAAGCA GTG

SEQ ID NO:2272: (Length of Sequence = 150 Nucleotides)

CTCCCCCTGT AATCCCAGCG CTTTGGGAGG CCGAGGCGGG GGGATCACGA GGTCAAGAGA TCGAGACCAT CCTGGCCAAC ATGGTGAAAC CCCGTCTCTA ATAAAAATAC AAAAATTAGC CGGGCATGGT GACGTGCACC TGTAGTCCCT

SEQ ID NO:2273: (Length of Sequence = 330 Nucleotides)

TATATTATGT TAATAAAATC ATGTATAAGC AAAAGACCTA TGAAAGTATA AAACAGACCA ATGGATTITA GTATAAAAGT ACAAAAACGTT CATTGAGGTG GGTTCAGTTT TCCCACAAAA ACTAACCTTT AAGAAACTAC CACTTATCAA GTTTTGGTAT AAGGTATAAAT ATGAAAGANG AAAATCCATA ATTATTTGAA AAACACANCT TAAATACTTT CCTTTTTTCC TACTACATAT CTCTATTAGG CTGGGTTTTC TTCACAACTA ATTGAATACA AAAACAAATA TGAGNATTTA GCTGTAATCT ATTAATCCCG ACATTACAGG

SEQ ID NO:2274: (Length of Sequence = 372 Nucleotides)

AAAAAGCCAG TIGCAGIGGI ATATGCCIAT TGICCCAGCI AATCAGGAGG CIGAGAIGGG AGGATAGCIT GAGCCCAAGA
GITTGCGACT GGGCCTGGGC AACATAGCAA GACCCTATCI CIAAATCAAT CAATCAATCA AACAGIGGIA TGCCACCCAG
AATAAGTATC TITTTTGAAG TAAAAAACAA AAAGCGAAAT GGGAACAACA GGICTGGTAG TGGTGGCTGI CIGICACTGA
CAATGAGGIC TCIGCAGAGC CGITCCCTAC CCINCCCAAC CCCCTAGACA TCAGGTCCCT TTCCTAGGAA AATGAGAGCA
CAGACCTAGG NCCATGGNCI CCCAAACTIT TICTTCTCTI CACTACAGAT TC

SEO ID NO:2275: (Length of Sequence = 370 Nucleotides)

CTTATTCTTT TCCTGAGGAT GITGGITTTA TATGGATTGI CTTTAAGCAT CACTTGGAAA CGCTACAAAT AATGCAGCTA
AATGITTAAG CAATTAGGAA ATAGGAATTT TTAAATACAG AATTITGCAC TGCAGAGTGI TTACAAGTAT TAAAAGATTG

TAITACACAA CIGITGITAA ATTCIAGIAA GATAAATTGA TACTAAAGAA AACAAACCCA GAAAGATCAA GTGACITGGA TCACACAACA CAGGNATTAA GANGGAAATT AGTATTCTTT GTTGGAATAT TITCCATTTG AATAGITACA GGAAAATTTA TTTGCATATT TTACAAATTA AATGTGTATT GGACATCATA GTGGGGAAAT

### SEO ID NO:2276: (Length of Sequence = 349 Nucleotides)

TCTCCAGGTC CTGGAGGCAA CCGCAGAAAC AGAACANTGC AAATGCCAGC ATTTCCGCAG ATAAGCGTGG CCCGCCAGCT
GCAAACACCC CTGACATGCA GCCGTCTGTT TAAAATCTGG TTGCCCGCTG CAGCCAGTGG AGCTCAGAGG GCTGCCTGGC
GGGTAAGGAC TCCAGGCACA CAGCAACAAG TGGCTGCCAC CTCAAATCCC ACGTGGAATA TGATGGGGTC CGAGCCAGCC
AGTAACTCCA NGAGGGCTGT AGTGTTAAG TTCGGCCAGA GTTTNCAGAT ATAATANCAT TGGCCCCACG ACGTAGACCT
GTGGCGGCTC AGGGTTAAGA GACGGGAGC

### SEO ID NO:2277: (Length of Sequence = 182 Nucleotides)

CTITATATAG ACTOTOGITO TAGAAACTOG COIGCAGCOG CTGGCTGGAC CAGCACACGC TGACGGGGCC GGACTATITA
CAGGCCCATT GCGGCCTGTA CCTTGGCCAC CTNCCGGCAC GGTGCTCAGC TGTGACGNCA AAATAAGTTA GGGCCGGCCG
GGCGGGGCGG GGCGGGGACG GG

## SEO ID NO:2278: (Length of Sequence = 276 Nucleotides)

GTATTATTIT CCCCAAATGA AGCAAAGCAA GTACTGGGGC GGAGTCATCA GAAATACCTI GGGAGGIGGI GGGGAGGGGA GTCGGGAGCA TCAGGGAAAA CCCATCTCAA CTCACGCCTC TCAGGGGTTG CGACTGGAAA MTCTTGCGTT TTCCATCACT GGTGCAGAAA GAACTTCCCC AGGAATGGCC AGTGGCCTTT CGCCCGTAAC AAGGNCGCAC GCTCAGAGCA GTCTTCCTCC TGGGCTGGGT GGACGCGGAG GCGCGAAGGA AAGCCT

### SEO ID NO:2279: (Length of Sequence = 193 Nucleotides)

TECACCCATE GCCCCTCCCA GAGCCCCAGG GCCCCTGAGC AAGCAGGGCT CTGGCAGCAG CCAGCCCATG GAGGTGCAGG
AAGGCTATGG CTTTGGC - GGAGATGATC CCTACTCAAG TGCAGAGCCC CATGTGTCAG GTGTGAAACG GTCCCGCTCA
GGTGAGGGCG AGGTGA. - GCTTATGCGC AAG

## SEO ID NO:2280: (Length of Sequence = 401 Nucleotides)

GIGATITICC TGICTCCGIC TCCTGAGIAG CIGGGATIAC AGGIGCCAAC CACCACGCCC AGCIAATITI TGIAGITITA
GIGGAGACGG TITCGCCATG TIGGCCAGGC TGGICTCGAA CTCCTGACCT CAGGIGATCC ATTCCCCTCG GICTCCCAAA
GIGCTGGAAT TACAGGCATG ACCCATTGCG CCCGGCCCCA CIGTTCCTT TCTAATCGAG TGAGAAAATG GICAGIATIT
CTGTCAACAA AATTCATGAG GCTCTTTGTA CGCACAGGAC TTCAGGCCTT TCTCTCAACA ATCGCCAAAG CTGGAGGCAT
CCACAATGGA GCNAACAACT GGGGGTTTTG AAAAAACAGG GAATGTTCC AGAATTNITC TTCAAGAGTA TTTACATTTT
T

## SEO ID NO:2281: (Length of Sequence = 217 Nucleotides)

AGCACGGGA TIGICCAAGG GTCCTCCGGC GCCCAGGGCA GTGGTGGTGG CAGCACGAGT GCCCACTATG CAGTCAACAG CCAGTTCACN ATGGGCGGCC CCGCCATCTC CATGGCGTCG CCCATGTCCA TCCCGACCAA CACCATGCAC TACGGGAGCT AGGGGCCCGN CCCGCGNAAC TNACAGCACC AGGAAACCAA ATGNATGTCC CTGCCCG

SEQ ID NO:2282: (Length of Sequence = 302 Nucleotides)

COGATGGTGA AGTGGTAAGA GGTCGATGGC CTGGGAGTTC ACTITATTAT GAAGTAGAAA TTCTGAGNCA CGACAGCACC
TCCCAGNITT ACACTGTAAA GTATAAAGAT GGAACAGAGC TTGANTTGAA AGAGAATGAT ATTAAGNCTT TAACTTCCTT
TAGGCAAAGG AAAGGTGGCT CAACTTCCAG TTCCCCTTCC AGACGCCGAG GGAGTCGATC AAGGTCACGC TCCCGATCCC
CCGGTCGACC ACCTAAAAGT GCCCGCCGAT CTGCTTCTGC TTTCCCCACCA GGGCGACATT AA

### SEQ ID NO:2283: (Length of Sequence = 314 Nucleotides)

GAAAAAGTGG AAGTCATCAC CGGGGAGGAG GCGGAGAGCA ATGTGTTACA GATGCAGTGC AAGCTGTTTG TTTTTGACAA
GACCTCACAG TCCTGGGTGG AGAGAGGCCG GGGGCTGCTC AGACTCAATG ACATGGCGTC CACCGATGAC GGCACACTAC
AGTCCCGACT AGTGATGCGG ACCCAGGGGA GCCTGCGACT GATCCTCAAC ACCAAGCTGT GGGCCCAGAT GCAGATCGAC
AAGGCCAGCG AGAAGGAGCA TTCGCATCAC AGCCATGGAC AACGAGGACC AGGGCGTGAA GGTCTTCCTG ATCT

### SEQ ID NO:2284: (Length of Sequence = 262 Nucleotides)

GEOGRACAC ACGCECCEG CCTGTTGGAG CATTTTAAAA TCTGATTCCT TTCCCCCTGA AGTTTCCGTT CAACCCTTNN CTGTGGTCAG GTTGATTNCT TTAATTGCTA AAACAAGTCA AAATTCAATA TCCATGGCAG CTGACAATTC AGACTTTGGC ATATAAAGTA AAGGGTTTAT TTTTCCATTC CTCTGTAAAT GGTGTTGTNT TCACTTATTT ATAGTGCTAT GAAGCTGGTC ACCTGGGAGA ATGGCATAAC TG

### SEO ID NO:2285: (Length of Sequence = 193 Nucleotides)

GTGAGACACA GTCTTGCTCT GCTGCCCAGG CTGGAGGGCA GTGTCTCGAT CTTGACTCAC TGCAGCTGAT GCCCCCTGGG
TTCAAGCGNT TNTCCCACCT CAGCCTCCAA GCAGCTGGGA TTACAAACAT GNACCACCAC GGCTGGGTAA TTTTTGTGTC
TTTAGTAGAG ACGGGGNTTT GCCANGTTGG CCA

#### SEQ ID NO:2287: (Length of Sequence = 342 Nucleotides)

AGCTGGAGT GCAGTGGCGC AATCTTGGCT CGCTGCAAGA TCTGCCTCCC AGGTTCACAC CATTCTCCCG CCTCAGCCTC CCAAGTGGCT GGGACCACAA GCACCCACCA CGCCTGGCCTA ATTTTTTTTTG TATTTTTAGT AGAGACGGG TTTCACCATG TTAGCCAGGA TGGTCTCAAT CTCCTGACCT TGTGATCCGC CCGCCTCGGC CTCCCAAAGT GCTGGGATTA CAGGCGTGAN CACTTGCGCC CGGCCTTCAC CTGTTAGTTT TTCAAGAGGT GTTCGTCATG TCCACTGTGA TAGTTATTTT GTGTGTCAAA CTGACTGGCC CACGGGGTGC CC

## SEQ ID NO:2288: (Length of Sequence = 343 Nucleotides)

### SEQ ID NO:2289: (Length of Sequence = 160 Nucleotides)

CGGGCCGCAA AGCTCAGCTC CTGGCGGTCC AGGCCCTGGT GGCTCTTGAT GATCAGGTCC ACGCCGGCTG CCACACGWTC CTCTAGGCCC TTCAGCGGCA NAGCGNCTCC AGCACCCTGT TGTGCTCCAT GTCCGTNAAC TGCTGCACGA AGAAGCATAT

SEQ ID NO:2290: (Length of Sequence = 310 Nucleotides)

CCGACTCTAC TGAAAATACA AAATTAGCCG GGCGTGGTGA CGCATGCCTG TAATCCCAGC TACTCGGGAG GCTGAGGCAG
GAGAATTGCT TGAACCCGGG AGGTGGAGGT TTGCAGTGAT CACACCACTG CACTCTAGCC TGGGTGACAA GAGCAAAACT
CTGTCTCAAA AAAAAAAAAA AAAAGNTTAA ATGAGGTCAT GAGGGTGAGA CCCTGATCCA AGCTCATAAG TGTCCTTAGA
NGTGTCCTTA GAAGTGTCCT TAGGACACTT CTTTCTAAGT NTCCTAAGTT GGGGAGCTTG CTCTCCCCAA

SEO ID NO:2291: (Length of Sequence = 270 Nucleotides)

CAAGACAGGG TCTCATTCTA TCTATTGCCC AGGCTGGAGT GCAGTGGTGC AATCTTGGCT CACTGCAGAC TCAACCTCCC AGGNTCAAGT GATGGAATTC CCNCAGTTTG TCTTTGACAT TAAGANGACA CCACATATAG ACGCTGTTT GTCAGTGATT GCCCAGGNAT TCATGGATGC ATTINCTCTC ACAGAGCAGC AACTAGGGAA GGAAGCACCA ACTAATAAGC TTCTCTATGC CAAGGNTATC CCAACCTACA AAGAAGAAGT

SEQ ID NO:2292: (Length of Sequence = 332 Nucleotides)

CAGTIGICCI ATATICICCA CCITCCCITG GITTCATTIC TCITCGCTTC CIGAATGAGA AGTGCCTGAG ATACCTICAT
TTCTCTTGAA AGTATTGATC CAAGTITAGA CAAATATCIC CCCTCTTGIT GAGAGAATTC CITATATGIG AAAATACCAA
GACATTCTIG ATATITAGCA GGCACTCAAA TATITGTCIC CICTTTTTTA GCATAATTAA GCCAGACTGA TGITTGCATT
TGAGTATCAT CAGCATGAGT AACCNITTTA ATCTCTCTTC CCTTAACTAC TIGTTCTACA CTAGAGTCTA GGGTCAGGGT
ACGTACAGTG AT

SEO ID NO:2293: (Length of Sequence = 255 Nucleotides)

GCACCIGACT TATGIGAGIN TCAGGCITCA ATGCCIGINT TAGAGCIACT CCTTCACACA AAATAGITCA GAACATAGAG AAGGACCAAG GITAATAAAT GATTTINATC CCAAACACTA AACATGATTG ATGGGTAGAG GCTGCCCGAA GTACTGIGIA AAGATGGAAT CTGAGATAGA AGAATGCIGI GGTCAATTAG TAATTCTTGC CCATGGAGGG ATTAGTGACA CATGCCTTGI ATATTTGTCA TCTGT

SEQ ID NO:2294: (Length of Sequence = 236 Nucleotides)

GGCTTCAGAA GCTATTGGAA GATTCATATC AACTTACTAA TAATCAAGCA CTTTCATATT AAGACAATGI ATGATGITTA GTAAAATTGA TTTTNCCATA AAAGAAGITT AAAATAAATT AGCTATTTCA AGAGNATCAT GGTTGTCAGC AAATAGAAAT GTTGTGCTTA ACTCAAATCA CAGTAATATT CTGTGGTAGT CAATTGATTT CTTTGAGCCN TTATTCTTTC ATCTGT

SEO ID NO:2295: (Length of Sequence = 308 Nucleotides)

TITTAATTIA ATCAGIAACI TIATTATAAC AAAACCIGIA TATTACCCAT TTAAACICAT GIGIAACATT CAGIGATGIG
AGCIGIATTIA AACCCAGGIA TIAGIGAAAA TITGCATIGI AAAACCIGGI AACAGIAGAC ATCTATGGGI GGICAGIAAT
TCAAGGACAC CITTTATTIT AAACAATTIT ATATAATICA TATCAATATG CAAAATTACC ATAAAAGATA CANGGATTAA
TACATATTIA CATTTITTAGA AATAGITACT CIGAGGITGA CAGCTGICAC TITTCTAAAT ATTTACAG

SEO ID NO:2296: (Length of Sequence = 279 Nucleotides)

ACCCCICCTG GAGGCTTTCC CCCTCCCCAG GGCTTCCCTC AGGGCTACGG TGCCCCGCCA CAGTICAGTT TTGGCTACGG GCCTCCACCT CCACCAGCCA CTCCCGGGGC AGCACCTCTG GCTTTCCCAC CGCCTCCGTC TCAGGCTGCC CCGGACATGA GCAAGCCCCC GANAGCTCAG CCAGANITCC CCTATGGTCA GTATGCAGGT TACGGCCAGG ACTTGAGTGG CTTCCGACA

SEO ID NO:2297: (Length of Sequence = 306 Nucleotides)

CTGAGAAGAA AGAGTGTGTT GTAAAGGACA ATGACTTTGA GCCCAGAGCC CTGAAAGCTA ATGGAGAAGT TATCATTGAA
ATTCCAACAA GAGCTTGTGA AGGACAAGAA AATGCTATCA AGTCCCTGGN GCATGTACAA TTTNAAGCAA CAATTGAATA
TTCCCGAAGA GGAGACCTTC ATGTCACACT TACTTCTGCT GCTGGAACTA GCACTGTGCT CTTGGCTGAA AGAGAACGGG
ATACATCTCC TAATGGCTTT AAGAATTGGG ACTTCATNGT CTGTTCACAC ATTGGGGAGA GAACCC

### SEQ ID NO:2298: (Length of Sequence = 307 Nucleotides)

AGIACACCIA GTATCTITAC AGIGACTATI AAGIATTITIT GAACTCAAAG TATATATICA TCTTAAACIC CIGGAACTAT GAACCCICCC ATGIAATTIN CIGATGAATG AAAAGGAAAA CITICTITCA AATAAGIGIC ATCTGITGCA AAAGIATGIG ATTTAAAAAAC ACATGIAAAT ATAATCTTAG CICTAATGIT TTCCTTTGGG AGITTGGGAA AAAGCAGITA CATTTCTCTG TTGTCTGGTT TTTATCATTT GAAAATTGGA AGGATTCATT CIGGATTGCT GAGCTGCATC AGIACGG

## SEO ID NO:2299: (Length of Sequence = 289

GITTITIANTS CATTITITIT AAAGATTAAA GIAAAATGIC TCAATIGIAA AAAATACACA CCGGGCAAAT CCITACCTGG
MIAATAAATA TCTACATCAC AGTACAATAA AATINCINCT CTATAAAATT TAAATATGGA TTATAGICTA TCACTATCAA
AAGAAACACT ATGCTAATAT TTCCATATTA TTAAAATAAC AGGAAAAATT ACGRGCTTAT TTTAGAACCT GATGCCATAG
CCGTTGGAAA GGGCAAAGAG ATTCAAATGI CGATCATCAC TCTCCCATTT

#### SEQ ID NO:2300: (Length of Sequence = 371 Nucleotides)

CACCCATTGA AAAAGCAGCC GCCCTCCTTC CCAGGAGCTG CTGAAGAGAG AGCCTGCCAG AGCCTTGCCA GCAGGGACAG
CCTCTTAGAT ACCAGCAGCG TCTCAGAACC CAACGTGTCC TTTGTCTCNC ACTGTGCGGA CAGCAACAGT GGTGACATAG
CTGTNATCGN GGAGGTCCGG ATGGAAAACC CAAAGGAGAG TAGCAGTTCC CTGAAGACTG GGAGGCACAG CTNAGGCCAA
GACAAACCAC ACGNAACTTA CCGACTGCTG AAACGCAGGA NTCTGATCAT AGAAGCTGTC ACCAATCTTC GCTTAATCGA
GAGTTTATTC ACGGTTCAGA AGATGATCAT GGATCAGGAG AAGCAGGAAG G

# SEO ID NO: 2301: (Length of Sequence = 287 Nucleotides)

ACTIGGIGIT GGGATTIGIT GTGAGGITIG CIGACACCIT GACCATITIT CACTGGCTGG AAATGAAAGG AACTTCCCAC
TTGCTCTITG AAGGCAATIC CATTCTCCC AGGGTCCTTA TITCCTTCCC ATATTCTCTC ACACTCCCAA ACTTCTGAAG
AAGGGAGCAA ACTTTGGCCA CGAGGAAGGA GINGAGCTGC CTCTGTACTT GTCACTGCAC CTGCACTGGT TGAATCCACC
TTTCCTGGGT CACGCCGCTG TGCTGGGTGG TCACAGCCTA GGACCCC

## SEO ID NO:2302: (Length of Sequence = 358 Nucleotides)

GGAACACAGG ATCCAAACTT GTCGGGGAAC TCGGAGAGAA GATCATCGTT GGCGCGGTCC TTGGTGGGCC CAAGGATGAT
GATGGGGGGA GCATAGTGCA CTTCCATCTG CGTCACTGTC TCGTAGCTCA GAACCGAGTC TTCTCGACCC TGCGATCCAG
AGCTGGAGCC CCAGTCCTTG GCCTTTAACC TTGACCACTC TCGTCGCTCA ACCCGCCGTT TGCTGGGGAT GAACCCAATG
TCGTCGGTCT CACTGTCAGA GTGGACCCGC CGTGACTGCC ACCACTCCTC ATCACTAGCA TCGATGACAT GCAGCACATN
CCCAAAGCGG AAGTTCAAGG GCCTGGCTCA GGAAGCCG

### SEO ID NO:2303: (Length of Sequence = 403 Nucleotides)

GTCAGGGGCT CCAGATCATC CTCCTCCAAG GGCCCCGCAG GCGCCTCCTT GGCCTCGGC TCCTGCTTGC CGCTGGCCTC
CAAGATGGTC ATGATGGAGT TAGGGATGIN AGCTTGCTGG TGGGGGGTGA AGGAGCGGAC ATGGGCCAGC AGGGGCTCCC
GGAGCTCTGG GCACTTNTCA AAGACGGCTC CCAGCTGCTG GGGCGGCANT GCAGGATGAC CTGGAAGCTC TGGGGCTTTG
TGCGCTGGCA GCACTTGATG AAGCCCTCCC ACACCTTGGG GTACTTCCAC AACTGCTTCA TGATGAGGGG GGACAGGATG

TTCATGACGG AAGCCCCCCA GGCGGGGTA CATGGTCANG GACCTGGATG ACGGTCCTCA TGAGCAACAT GGGCAAGGGG

SEQ ID NO:2304: (Length of Sequence = 376 Nucleotides)

ATCITECTAT GITGCCCAGG CIGGICITGA ACTOCTATIC TCAAGAGAGC CICCIGCCIC AGCCITGIAA AGCACIGGGA
TTATAGGCAT GAACCACCGC ACCCAGCCAA GAITGCCAIT TIGIATGATG AGACIGGAAG GACCCCATIG TITCAGGAIT
TTGCTACAAT ATACAAAAAAA CAATCIGIGA GACAGIGGCI GGGCITTITIT CCTGCCIGAT TAGITCAGIG CACATACAAC
TTGGACCAGA GGATCIGGGT TIGAATCCCA TCICIGATAC TTCCCAAACT GAGCIGITIT CCTTATITGT AAAGACTAAG
ATCGCGTATG TCAAAGAGCI CIGIAAACTC TCAACACATA CAAAGTACTA CIGCIG

SEO ID NO:2305: (Length of Sequence = 354 Nucleotides)

CTGCCCAGCC TGCTCCTGGC CCCCTGGAAG CCTCCCCACA GCTGGTAATC TGGACTTAAG GATTGCTGGG CCACCGCCTC TCTGCCTACC ACCATTCCAT ATTTAAGTGG AGCCCTACG TAGAAAGGCC CCGGGGCTT ATTTTAGTCT CCTTTTCAGG GATGTCGTGG GCGGGGAGG GGGTTCTTGG TGCTACAGCC CTCTCCCCAC CCCTAAAGGG ACGCCGACGC TGTTTGCTGC CTTCACCACA TATTAGTGCT TGACCCTGGC AGGGGACCCC ATGGAAAAGA TGGGGAAGAG CAAAATACAT GGAGACGACG CACCCTNCAG GGATGCTGGC TTGGGATTCC CACG

SEO ID NO:2306: (Length of Sequence = 345 Nucleotides)

CCAAGATCCI AAGIAATTCC AAATGCCTIA GATATCAATG AAAGCTACAC ACCATTGAGA TGGGCAAAAT TCTTTCTCTA
CAAAGGGAGT AATCAAGIAA ATACCTGTCC TCTTTCAATG GACTGTTGCC TATTGAGCAT TGTGGATGAT GTGTTTTCAG
ATTTCCAGGT GAAGTTCTGA CCCTACCTGT TTGGCCAAAG ACGTAAATTG AGAGGAAAAGG CCTTGGTCTT CCTGATCAAC
CAGCATTTAA CGAACAGTGG CTTAATGCAG ATCACTCAAG AGGNAGCATA GCAATGTAAA AGGAATATAA GTAGGTGTTG
GATGCCTTTT TCCTAGACCA GGAAT

SEQ ID NO:2307: (Length of Sequence = 337 Nucleotides)

AACAGAATGT AAAAATACGC AAGTCAAAAC CTGGTAGAAC TGCATGGAGA AACAAATGGA TTCAATATTA TNAGTCGGGA
AATTCAACGC CCTCCTATCG AAAATGGACA GATCCAGCAG GCAGAAAATT AGTAAGGACA TTGTTGAGCT CTGCAATACC
ATCAATCAAC TGGATATAAT GGACATCTAT AGACTACTTC AACAACAGCA GAAGATACAT TCTTCTCAAG CTCACATGGA
ACATTCACAA AGATAGACCA CACGCAGGCC CATAAAGCAC ACCTTAACAA ATTTAAAATA ATATAAATCA TACAGTGTGC
TCTCAAACCC NCAGTGG

SEQ ID NO:2308: (Length of Sequence = 216 Nucleotides)

GAGGAGTAAA CINTITICIG AGAAGCATGC TTAGGITGIG GGACAGGAAG TGGITAAAGGC AATGCATCGI CCACAGAGGI GGATGAAGCA GINACAAAGG AATGATAATT TNANCTGCTG GTGGCATCTN CACTGCTGGA GTGTATGGCA GCAATCATCT TACTCTCCAT CATCCTGGTG GGGGCCAGIN GTGCAGGAAA GCCACAGGGA TTCGCA

SEQ ID NO:2309: (Length of Sequence = 289 Nucleotides)

GGGCTATGA AAATACAAAA AACATTAGCA CATICATAGI ATGIATGIGI CTACAGGCAT TINCCCAGCC CTATGAGAGT NCIGCAATTI GAGAAGIACT AAAATGIATT GITTGGTGAC AAGAACTGCA ATAAAAAGAT AAATGATTIN CTGAATGITG TGGCAAAGCA GICTATITCC ACTGCAATTI CTGCTACTAT TAGCTTAAAA ATTGCTGAGA CAAAGGACAA CCITCTGATT AINCIGCTGA GATCTAATGC AAAGTCCTCT CAGANGCTTC ACTACACAT

SEQ ID NO:2310: (Length of Sequence = 359 Nucleotides)

CTENEGGCTG CCTCTCGTTG GTCAAATCCA ACCAAAAGCT AAGAGCTGGA GAGCTTGGGT GGTGCATCCA AGGAGGCTTG
CTTCCTGGGG CACAGAAGGG AGAGTGGAGA AGGATGGAAA GTGGCTCTAG GGGAGGAAAT GGAGAACATC CAGAACTTTA
TGTCACCTCT GGTGCTTGAA GGCCTTTCTC CAGGGAGACA AAAAGTTTGT NITGGCTAAA GCTCCCTGGT TGCTCAGGAG
CCAAGGGTCA CATAATGTGC CAATGGGGT TTTTGCCTCT GAAAGCCTCT GAGGTATAAT TACTTGCAAT GNNAACATCC
CTTTTCTCTC TCTTCCTCTG CCCACCTTCC ATGCCAAGG

SEQ ID NO:2311: (Length of Sequence = 324 Nucleotides)

GTINGGGCC GGCCTGGGCA ACATAGACAC CATCICTITA AACAAACAAA CATCATTAGI TICTACATIC TACAAGGIGA AAGACTAATI AGAAGTGAAA AATACCACTG AAATGITGGI GTACAAATGG CAGCATAATI TGATTIACAC TAGATITIAC ACATTITGTG CTATTICAAA TAGGTACTIT TACATTITCC TTAACTGCAT CTGACACAGA GTGAATCACA GATATATGIT GGTGCGAAAA GCAGAGGITA CTATTATTAA NCGAAAATTI TTGTGGTTTT GCAGTCATCA TATCTAATGT GGTTACAGAT TGTG

SEQ ID NO:2312: (Length of Sequence = 362 Nucleotides)

GNAGITIATA AAGCITIATI AAACATITCA AACAGTGG CAACGAACAC ACCAAATAAA AGCICTAGAA TAGCAGTCCA
GACGITICAC AAGTATGGCC TCACAGTCCC ATTCCCTAGA TGGACTGCCT CCAGTNCTGT NCTCTGCCTG GCCCATCTCT
CTTTCCCCTC AGGCAAGAGA GAGATGGATG GNTCAGACTG AAAGGACAGG CATGCTGATC TCCAGCAGGC AGGGGCCAGG
AGAAAGTCTC GTTTGCCAAC ACTTGTTACT GAAGCCCAGA AAAAGCAGCA AGTGACAGTC ACAAAGTCTT CCTGGGGTAT
TCTTCATAAC GTACAGTCTA TATGCGCAGG AACGAGGAAG CT

SEO ID NO:2313: (Length of Sequence = 449 Nucleotides)

TGTAATTTT AAATTAAGAC TGCCTTAGTG AGAAAATTTC AGCAGGTGAG TTAAGGGCAC GAGGAAAGGG CCTTTGTGCA
GAAGTAATGA CATAGGCAAA TTGTCAAAGG AGAGGTTCCC TGGTGTATTT NTAGAAGAAA GTAGACCCAT GTNTCTGAAC
CCAGCACACA GTTCACTTAT GGTGGTTTTG AAATCTGCCC TGGAATTTNC ATGCATCTTT TAAATTTTTG GTTTATTTTT
NCAAGAAATA AATGAAGTCT TTATTTTTNC AATGAGGGCA ATGTTTATTA AGAACAGCAC ATAAGGTAGA AAAGAAGGTT
GGTTTCTAAT CTTCGTTCAT CTCCCCCACT GATCTTGAGT TTTAAAAGCA TAGAGAGCAC GATCCTTCTG TGGGGTCTCC
ACTGTCAGAG AGCCTGTNCA GATGAGCAGT CACACTGTTA CTCCACAGC

SEO ID NO:2314: (Length of Sequence = 316 Nucleotides)

CEAGGCAAAC ACAAAGGCT CCTTCTGCTT CTCTGACCCC ACCTGCAGCA GGTAGTGGAT AACAGCCCCT ATGGCCTCCT
TCATGACGCT CACGAGCTGC ACCTTCTGTG GCTCCTTTAAG CAGTGACTGC TCACAGCGAG TGCATTCCTG GNTCCCCAAC
TCCATGAGGG CATAGCAGGC GGTCACCACA TCCTCTTTCA CCTCCGTGCC CGINTCCTCC AGTGCCAGCC GCACTTCCAC
GNACGNCAGA TTCACCAGCA GGGCCAGGAA CTTGCTCCCG GAGCTGCCCG CCGGGATCCA GTCCGAGCCG CAGGTG

SEO ID NO:2315: (Length of Sequence = 286 Nucleotides)

ATTITIATGI GIAGACAGGC IGIGGGITCC CCICACTIAA ATTGAAGCIC IGIIGAACTI GAGACACTIA AGANICITGC
AAGINIGAAA AGIGGAGIGA AACAAAACCA ITICIAAAAC GAAAATGIGI AACINCNITC AGITITACAC AGIGNAGAAA
TAAGIATTAA ACAAGITAGI CICAAACGGI TATATCITAA GGICATITTA TICCIGITAT CATTAACTAG ACATATCITG
GITTAGAGAG CAGCACACAA GACATTGIGI ACINITTAAT AGCTAA

SEQ ID NO:2316: (Length of Sequence = 414 Nucleotides)

AATCATAGCT TACTGTGGCC TOGATGTCCT GAGCTCAGGC GATCCTCTCC TTATAGCCTC CAGAGTAGCT GGGACTATAG
GTGCGTGCCA CCACACCCTG CTAATTINAT GTTTTGAAGA GACCGGGTCT CACTTTGTTG CCCAGGCTGG TGTCAGACTC
CTGGGCTCAA GCTAAATCAC CCACCTTGGC TTCCCCAAAGT GTCGGGATTA CAGGTGTGAG CCACTGCGCC CAGCTCTGAT
TTTTTGTATTT CTTACTTAAG GCGACATACT TAGTAGCTGT GCGTCTTGGG GCAGATACCT CCCCAAAGCCC CAGTTCTGTC
ATCTATAAAT AATGTAACAA CAGGCCCCG CTCGCAGGGT TGCTGTGTGC ACATATGTGT GTGTACGTAC CCATGTGCCT
NTACGAGAAG GGCT

<u>SEQ ID NO:2317:</u> (Length of Sequence = 166 Nucleotides)

GCAGTGACTA TTATTAACAT TACAGTACCA AGCATCCGCA AGAGACAGTC ATTIGINATT TTINATCAAG AAATAGGGCT

GITTIATACT GITATIGACA TCAACITTIT CCCAGIGCAT TITICAAAAA TAITAATAAG TICATICCIT TGIGCITITA

ACTTCC

SEQ ID NO:2318: (Length of Sequence = 374 Nucleotides)

TITATITIAC ACTIACAAAA GAAATGCCC ACCCCTTGC CCCATTCCCC CAAAACAGIC TCTTTTTACA AACATTTAAA
AATTAAAACC AAATGAAGAT AGACAAGITA ATTCAGTAC AATTATITIN CAGIGTAGCT GTCATAATTA GAGITTAAAT
TTCCTACAAG TGACCAATGT CCAAGTGACT TATAGGGAAA TCCTGATTAT CGGCCAAAGG AAATTCAATA TIACAAGITA
GCAAATTCTT AGTACAAAAA TAGTCCGTGT GTTGGAACAG CTTTTCCTTG TTACATAGGT CTTAGGTCAG TCTGCTGINA

SEQ ID NO:2319: (Length of Sequence = 380 Nucleotides)

ATACCITAAC GNTTCCGGAT TCINNTCTCA CAAATG ? AATCGTCACT GCTG

CATCITAGIT CATGGIAATC TCCTTGGCAG CACTIATTGT CTTTGTGTGA GAGCAAATGA TAGAGTCATC CATTCAAGIT
AATTAAGAGC ATCTGCATTG CAAAACTGGT CACTAAATTG CTCGCCAAAT TTGAGGCTTT TTTCCTGCCA ACACAAATTA
ATTTTTTAAG TAGCAGCATT TTCAGGAGAG ACCAAATAAA GAAAGCAACA ATAAAGTTGC CTGTCTAGTG AGATGTCCCC
AAACTATCAA CTTTAAACAT ACCTTTGCCT TTNATAGTAG TTCTTCACAC AAACTGCCTT AATCAAAATG CGTGTCTCTT
GCTCTGTCAT TTTATGTTTT GGCTCTTTAG CAACCTAATT GTATGGTTAG ACAGATTCCT

SEO ID NO:2320: (Length of Sequence = 348 Nucleotides)

GEAGITCTCT TGTCCACGGA GAGCAGIGIT GCAGIGIATG GAATGCTAAA TCTTACCCCA AAGGGCAAGC AGGCTCCAGG
TGGCCATGAG CIGAGITGTG ACTICTGGGA ACTAATTGGG TTGGCCCCTG CTGGAGGAGC TGACAACCTG ATCAATGAGG
AGTCTGACGT TGATGTCCAG CTCAACAACA GACACATGAT GATCCNAGGA GAAAACATGT CCAAAATCCT AAAAGCACGA
TCCATGGTCA CCAGGIGCTT TAGAGATCAC TTCTTTNATA GGGGGGTACT ATGAAGTTAC TTCCTCCAAC ATTAGTGCAA
ACACAAAGTA NGAAGGTGGT GCCACACT

SEQ ID NO:2321: (Length of Sequence = 330 Nucleotides)

ATCTAGACTT TRAGTICCCT GCATCTGCCA CCGTAGTITC TAGCAGGAGT AGTGGGGGGA GTAATACAGA TICINCCCTA
GAAGGGGACA CTGGTAACAT GTCCCACTCT TGGATTAGCA GGGGTGGGTC CAGGAAGATG ATATTINCNI CTTTTGCCCA
CCCCCCTGGC ATTCAGCTGG ACCCAACTAG GCCATCATGA GTGGCTTCTC CCTGTCATCC CCAGGGGTCA TAGGATATCT
ACACCGCCTT TRIGACCCCA CCCTGCACTC CCATCCTTTC CTCTCTCCCC GGTTCATGCC CTGCACTACA TAGCACAGCC
GGGATGCTTN

SEO ID NO:2322: (Length of Sequence = 352 Nucleotides)

TTGACAAGTA AGTGTATATA TTTAAGGTGT ACAATGTGAT GCTTTGATAC ATACAGTGTG AAATGATTAC CACAGTTAGG
TTTAATAATT AACATATCCA TCATCTCACA TAGGTATGAT TTCTTATGTG TGTGGCGAGA ATCCTGAAAA TCAACTCTGA
GCACATTTCA AGTGTACAAT ACAGTATTTA TGATAGTCAC CATGCTGTTA ATCAGATTGC CTACCTTGGT TAAAGTGCAG
ACTCAGGTGA AGGTCTGGAT GGAGGATCAT ACTTTAATTG ATTTAGACTC TAAAATAAAT GTATATAGTT ATTTTTGCTA
ACCTAANGAA CCTACTCATA AATGGCCTAG TG

## SEO ID NO:2323: (Length of Sequence = 316 Nucleotides)

GAGACAGAGT CICTCTCTGT CGCCCGGGCT GGAGTGCAGT GGCACAACTC AGCTCACTGC AACCTCCGCC TCCCAGATGT CCAAGTGATC AAGGGGTTTC ATTTGCTCTT GGGGGATTAG GTATCATTTG GGGAGGAAGC ATGTGTTCTG TGAGGTTGTT CGGCTATGTC CAAGTGTCGT TTACTAATAG TGGAGACGG GTTTCACCAT GTTGGCCAGG CAGGACCTCA GGTGATCTGC CCACCTCAGC CTCCCGAAGT GCTGGGATTA CAGGCATGAG TCACCACACC CGGCTTCATT TATTTTCTTA TCCATG

## SEO ID NO:2324: (Length of Sequence = 300 Nucleotides)

GEGGACAGGA GGTGACCTCG CGAGCAGACG CGCGCNCCAN ACAAGCAAGC CCGCCCCGGC CTCTCGGGAG CCGTGGGGCA
GAGGCTGCGG ANCCCAGGAG GGCCGGAGCC CTCATGANIT CANTNACCTG CTTCTCCCCC TNTAGGTCTA TCAGCCACAG
TNTCTGCAAG TTTCCAAGAG CAGCAGAAAA TGAACACATT NCAGGGGCCA GTTTCATTCA AAGATGTGGC TGTGGATTTC
ACCCAGGNGG AGTGGCAGCA ACTGGACCCT GATGAGAAGA TAGCATACGG GGATGTGATG

### SEQ ID NO:2325: (Length of Sequence = 303 Nucleotides)

CTGTCTCAAA TAATAATGAT AATATTINCT TATGCTTACT TTACTGTAAG ATTACAGTAT ACATTACAAC ATATGCGTTT
ATTGACTGTT TATGTTATTG ATAAGGCTTC TAGTCAACAG TAGGTTACTA GTAATTAAGT TTTTGAGGAG TCAAAAGTTA
TGTGTGGATT TTCAACTGTG GACTTTGGTG CCTCTAACCC TGTGTTGTTC AGGGGTCAAC TGTGTATTCT TTCTGTGGNA
ACATTTTTAG ATGTTATAGC CTTTAGACAT TAGAAATGGA AATTTAGTTG AACTCGNGTG TTC

# SEO ID NO:2326: (Length of Sequence = 348 Nucleotides)

GTTGGTCTCG TGTGGCACAT GACACAATCT CTCCCGTCCC TGGAGGCCAG CTCCCCGTG GCCAACCTCA GGCCTCCCAT
GGCATCTCAG GGCTCCTCCA GCCAGACTGG CGCCATCCAA TTAACCTGAT GGTGGCTGAG CAGCTCAGGT CTGTGCCAGC
CCCTGCAGGA GGCAGATCAT GTTGTCCAGG CCCCAGAGGT AGCCGTCCTC ACGGTTGCCN TCAGCCCAGG GCAGCCTGTG
GCTGAGCGTC TGGTGGTCGG GCAAGGCCAC CGTCTTGCCG AAGTCTATCA TCCAGACCTT GGCCAGGCCG GTGTGGTCGT
GCACGAAGAG GAGGGAGCTT CCTACCAC

### SEO ID NO:2327: (Length of Sequence = 392 Nucleotides)

AGCIGITITI TOCTAGCTGC CAAGACTGIT GAGGAAGATG AGAGAATTCC AGTACTAAAG GTATTGGCAA GAGACAGTTT
CTGTGGATGI TOCTCATCTG AAATTTTGAG AATGGGAGGA ATTATTCTGG ATAAGTTGAA TTGGGATCTT CACACAGCCA
CACCATTGGA TITTCTTCAT ATTTTCCATG CCATTGCAGT GTCAACTAGG CCTCAGTTAC TITTCAGTTT GCCCAAATTG
AGCCCATCTC AACATTTGGC AGTCCTTACC ANGCAACTAC TTCACTGTAT GGCCTGCAAC CAACTTCTGC AATTCAGAGG
ATCCATGCTT GCTCTGGCCA TGGTTAGTCT GGAAATTGAG GAAACTCATT CCTGATTGGC TTTCTCTTAC AA

## SEO ID NO:2328: (Length of Sequence = 256 Nucleotides)

ACGAGCACAC TCTTCACAGI GGGGCGGAAC ATCAGAAAAT GGGAGCCTTC TTCTAATGGC TGTNCTTTTC TGTTGGGAAA AAAAAAAAAC AAATCCTCCA AACCACACCG GATGGTTGTA AAAAGCTGCA ACGGAACCTT TGGCACCNGA TGAGAAGAGA GECCITITAA TECCATACCI AGIGATGATI CANICAAAGC ATCAGTCTAA GGAAGGATGA TEGGGGAAGG GACCNNAGAT CACAGNCCIT CTCCTT

### SEO ID NO:2329: (Length of Sequence = 383 Nucleotides)

AGTAGAGACA GCATTICATT ATGITGGCCA GGCTGGTCTC GAACTCCTCA CCTCAAGTGA TCTGCCTGCC TCGGCCTCCC
AAAGTGCGGG GATTACAGGC GTGAGCACNC ATGCCTGGCC TTTTTTTTT TTTTTTTTTAA CGAAGTTATT TTTCTAGAGC
ATTCATAGTT TGTTTTTATA CAGTTAAGGT TCTCATCCAT CTGGATTTTT TGGTAAGTGT GGGGAGAATA AAATGAGGAG
CCNCTGTTTT TTTCTCCAAA TGGCATGTAT TGTCCCAACA CAATTTATTG AATCAATAAT TCATCTCTCC CATACGAATT
TAAACTATTG AACTTTCACA TCAAAATTTT GGAACTACAA AGTAGGTTTA ACAAGGTGAG AAC

## SEO ID NO:2330: (Length of Sequence = 392 Nucleotides)

CGAAACGNIC TCAACCIAIT CTCAAACITI AAATGGGIAA GAAGCCCACT GGTCAGCATG GCAAAGCCCC AGCICTAATA
AAAAATGCAA AAAATTGGCT GGGAGTGGAG GCGGGGCCCT GTAATCCCAG CTACTTGGAA GGTTGAGCTG GGAGAGTTGC
TTGAGTCTGG GAGGCAGAGG TTGCAGTGAG CCGAGATCAC ACCACTGCAC TCCACCTTGA GCAACAGACT GAGACTCTGT
CTCAAAAAAA AAAAAAANT TATGCAAAGT GTCTTTTCCA ACAAAAGTGT AATGAAGCTA GAAGTCAATA ACAGGAAAAC
CTGGGNGAAT TTGCAAGTAA GTGAAAGTTA AACAACATTC TTAACCAGTG GCTCAAAAGGA GGAAATGACT GG

## SEO ID NO:2331: (Length of Sequence = 284 Nucleotides)

AAGAAAAGTA AATTCATCIT GCTCACAGTC CTTTCTGGAA GAGTTTAGAA AGCAAAGAAT TCACCGACTC AGCAGGAAGC
AGAACGAGCT GTTCCTTCTT TTGACACGCA CAAGCTAATC CCCTAGAGAG TGGGGATGTG GGAAACGGAG GGTAATTAAT ...
TCTTTGGTCA CTGGTTCACT GCTGAATAGC CTTGGTCAGT TTTGGCTCTC TCCTATTTTA GGGGGAAAAA TATTTTNGTT
TCTTTTTTTT AAAAAATAAA ATGTTCGCAC AATGGGAGAA AATT

### SEO ID NO: 2332: (Length of Sequence = 349 Nucleotides)

ATCITAAAAA GATTITIGI ATTINCITTI GAGACIGGGI CICAGICIGI IGCCCAGGCI GGAGIGIAGC AGCCIGATCA
IGGCICAGIG CAGCCICIAC CICCCCGGCC TCAGGIGATC CICCCCCTIC AGCCICCIGA GIAGCIGGGA CIACAGAGGT
GIGGCACCAT GCCCGGCIAA TITTIGIATI TITTGIGGAG AIGGGGTITT GCCATGITGC CCAGGCIAGI CITGAACICC
IGGAIGIGAG CCACIGCGIC TGGCCIATIA TITTAAATAT AGTTCTCTIT ACIGCCAGIA GCTTTCATAT AACCCIAGCG
ACIAGATITA GICACCACIG CTTAATICC

# SEO ID NO:2333: (Length of Sequence = 353 Nucleotides)

CCACCICICC GITCICGCI TCINAACCAC AGCCGCATCC TAITIGCAGC CCICAAGAIT AAGGAIGAAA ATTIGACTIT
TIAAITITAT TAITCITGIT CITCCITCCI ACTICATIAG AATCAIGITA TIGGCCIAAA ATACIGIAIG TAAAGGAIGC
TCIGGGGCCC ATCIGGAAGC CIGCATICIC TGGGGATATA ATTACGCIAA GCAATTITIC ACCAGGGACA GCATGACITA
GCTICIACCI GGGCATCCIC TGGCAACACA GCCCTCAGIT CTTCCAAAGG GATTGGCIGC TGICCCITCA GGCCTICTIC
TTGWGIGIGI GIGIGIGIGI GIGIGIGIGA TIC

### SEQ ID NO:2334: (Length of Sequence = 279 Nucleotides)

GOGOCTTCTA CNAGCTGCTG CTGCCGCNCT CATNCTGGTG GCGATGCTGC AGCTGCTCTA CCTGTCGGTG CTGTCCGGAC
TGCACGGGCA GGAGGAGCAA GACCAATATT TTAAGTTCTT TCCCCCGTCC CCACGGTCCG TGGACCAGGT CAAGGCGCAG
TCCGNACCGC GCTGGCCTCT GGAGGCGTCC TNGACGCTAG CGGCGATTAC CGCNTCTACA GGGGCCTGCT GAAGACCACC
ATNGACCCCA ACNATGTGAT CCTGGCCACG NACGCCAGC

SEO ID NO:2335: (Length of Sequence = 386 Nucleotides)

GCCTTTTGT CATGGTAGCA AAGTGGCTGC TGTGGCTCCA GGCATCACAC CCTCAATCAA GGTAGGAAGA AGAGGCCCAG
GGAGGTGTTA GCCATGCCTG TTTCTTTTAT TGGAAAAGCT TTCCCAGAAG CCCAGGTAGA CTTCCTCTIC AATTTCATTG
GCCACACCTG ATCACATAGC CATCCTAAGC TGCAAAGGAG ACTGGAACAG TGAAAATCTG GATTTACAGC CTCCACAGTT
GGAGTGGCTG GAGATACAGA GTTGGGACGA CCCCTGAAAA GTGAACCAAG GTCGTCTGCA CGGCTGCCCT GGAGGGCGTG
GTGCTTGAGG TCCCTTCTAC CTCTGGGGCT TCATGGAATG ACTTGTTGCC TCCATGGAGC ACCTCT

SEO ID NO:2336: (Length of Sequence = 258 Nucleotides)

CCCTAGCAAA CCACTGATGA CCGCCTGGAA GGGGCCAGCC TGTCGGTGCT CTGGGCCTTG CAGCTNTTTC TNTAGGGTTA
GCGGTGGTGC CGGGGTCACT TTCTGAATCT TTTTTTTTT TTTTCAAAAA GGAAAGTTTT TAATGGAAAG TTGAGCCAGA
ACTAAACCAG GGAGCTGTCT GAAATCATAG CACCCCATCC GGGTGGCGGG GAGATCAACT CCGAGCTGTT TTTCCGAGGC
AGTGAGGAAC GGTGCCGG

SEQ ID NO:2337: (Length of Sequence = 338 Nucleotides)

ATCTCTTTC CCACTTCATA AAAGCAAAAT ATGTAAGACT AGCATCTGGT TTTTGTCCCA ATAAAAAAAAT CCCACAACTT
TCAAGATATC ACTCTAGCTT TCTAAAGTAG AAAGGCAATT CAGGCAACAA AAAATATTTT TTAAAAATCT ATAGCCCAAA
TCACCAAAAG GTAAGGAAAG AACTTTCCTA GCAAGCTCTG GAGAAGACCT AATTTGGNCA TCAAAATGGA GCTTTCAGAC
ACTAATCAAG GCCATTAATT AAAAAAATTT TTTCAGGAAA ATAAGGCAGG TTGGATCTCT TTTCCCACTT CATAAAAGCA
AAATATGTGG CAGACTCT

SEQ ID NO:2338: (Length of Sequence = 410 Nucleotides)

GESTICITECT ATGCTGCCTA GECTEGTICTT GAACTCTTCA ACTGCASTCT TGACCTCCCA GECTCAAGTG ATCTTCTTAC
ATAGGCCTCC CAATGTGCCA GGATTATAGG CATGACCACC ATGCCAAGCT CCAGATGGTA TTCTTAATTC AGCTCACAAT
GTGCCCTCAT CAGATTGCTA GTGGCCAGGA GTGAACAACT GAGTGACTTT AAGAATCAGG ACACCAGGAA TATGTTCCTA
GAAAGTGAAG GTATGAGTGG AAAACCTGGG TTGGATTATG AACAAGGCCC ACATGTGTGC CAGAGTGGCC AGGGCAGGGA
GCAGCAGCAG GTGCTGGTGA AAGGAAGGTG GATTACTGGG GGCAATGCCT GTCTTTGTGT TATGGGTTTC TTTTGAGGGA
AGTAGATAAG

SEQ ID NO:2339: (Length of Sequence = 336 Nucleotides)

AGGGGAGGAG GGGGCTAAGG GCGGCTGGAG GAAGAGCGGAA ANAGATGGAA GCCTTCCGGC AGAAGGCAGA GCTGGGGGCGT
TTNTTGAGAC ATCAGTATAA CGCTCAACTC AGCAGACGCA CACAGCAGAT CCAAGAGGAG CTGGAGGCAG ACAGGCGGNT
CCTGCAGGCC CTCCTCGAGA AGGAGGACGA GAGCCAGCGC CTCCACCTGG CCAGGCGGGA GCAGGTCATG GCCGATNTGG
CCTGCNTGAA GCAGGCCCATT NAGGNGCAGC TTCAGCTGGA GCGGGCGGG GAGGCAGAGC TGCAGATGCT TCTTGAGGGA
GGAGGGCCCAA GGAGAT

SEQ ID NO:2340: (Length of Sequence = 290 Nucleotides)

TTTTAGTAGA GATGGGGGTT TCTCCTTGTT GGTCAGGCTG GTCTCGAACT CCCGACCTCA GGTGATCCAC CTGCCTCGGC
CTCCCAAAGT GTTGGGATTA CAGGCGTGAG CACNCGCGNC CGGCCTTCAG TTTCTTCCTA GGCCGTTCTG TCACCCAAAT
AGCTGCTACC CAGAGNGGCG GGGTTGACCT AGGCTGAATA TCCACTTTGT TTTTATGGAT GGCTNCCTTC CCCCATTCGN
CTTTNCCAGA ATATCCTTTC AAGTTNCANT TTCCCAGGGG AGCTCTTGGG

SEO ID NO:2341: (Length of Sequence = 298 Nucleotides)

TTTTGCTTAT TACCCGATTT ATTAGAGAGA TCTCTAAAAA GACGGGTGT GGCGGGGGTA GGTGGGCGAG GAACCTGGGA
TGCAAACCAG TGTTTGGGGC CAGGAGTGGC TGTATGGTTT CANAGGCGCC CACCACTCTG GGTTTGAGGG ACACAGCACC
CTCGTCTCGG CGCTTTGGAT TNTCACGCAC CAGACCACGG GGCGGAGGAA TGGAGTGGCA TCCCTGGGGG GAGTTAAGAC
ACACGAGGTT TGCAGTTTCA TTTTGTTTCA GAATCAGTTT GGCCATAAAA ATGGGACT

### SEQ ID NO:2342: (Length of Sequence = 316 Nucleotides)

CCTEAACAAG GTOGTGGTGG TGTGGAATTC TCCCAAGCTG CCATCAGAGG ACCITCTGTG GCCTGACATT GGCGTCCCCA
TCATGGTGGT CCGTACTGAG AAGAACAGTT TNAACAACCG ATTCTTACCC TGGAATGAAA TTGAGACAGA GGCCATCCTG
TCCATTGATG ACGATGCTCA CCTCCGCCAT GACGAAATCA TGTTTGGGTT CCGGGTGTGG AGAGAAGCTC GGGACCNCAT
CGTGGGCTTC CCTGGNCGTT ACCACGCATG GGACATCCCC CATCAGTCCT GGNTCTACAA CTCCAACTAC TCCTGT

### SEQ ID NO:2343: (Length of Sequence = 380 Nucleotides)

GGAAGAGGG GAAGGTTGGA CCTTCATCAG ACCACTCCCT TCCCCCATCC TCCAGGAGAG GGGGCAAGGG CAACCCACCA
TCTACCCACT TACTAACCTG GTCCTAACCC CCTTACTGTG CGCGTGTGTG TGCGTGTGCG CACGCTCTGG CTGTTTGTCT
ATATGTCTAG CTCATCTAGT TCCTCCTTCTT AAGGGGATGG GGGTCAGGGG CTAGGGGAGG GGGCTGAGTT TCCCCCACTTT
AGGAGGAGGT GGGGGCTATT TCTATGCAAA TAGAAATCAG CACATTCCTC CTACTTCCCT TTCCTCCACT CCCCCCATAT
CTTTAAAGTG TGGAAGCAGA AAAGGACCTG CATTTTTCCT ACAATTGAGG AGCTGACATA

### SEQ ID NO:2344: (Length of Sequence = 282 Nucleotides)

GEGARIATAT TIATECARAT TITATEGRAR TITATEGRAR ATRARGENTI TONCAGIGEN CIAGRARANC AGCITGRATG
NCATTCAGCA TITATEGRAG RAGGATGACA TOCCINCCAC TIATECRACA RACTEGGIAG CITTGAGACA RATACAGIAG
CACAGICOGI TEGRAGATIT GIOCARARAR TIAGECCATA TITTAGEGGC TORGEGICAR GNOFTCOCTIC COEGIGCOCC
CACEGITGCT TOEGCAGEGA TACGARGGAT GRATGCTITAR TI

### SEQ ID NO:2345: (Length of Sequence = 256 Nucleotides)

CTITATAGGA AGCTGCAAAA GAAATGAGCA GAGCGNGATA TTTGTGGTAA GGGATACAAA GAACATACAA TTGTGTACTT
GAGAGGTTTC ATGGAACATT ATGACCCCATC CAATGVAGAC ATCAACATTA ACAACAAAAA TTANITGAGG AAGAGCAGTA
TGAAAATATT CTAATGCAGT GCTGTCCAAC AGAACTTTCT GTGGTGATGG AAATGTTCCA TATCTTTGTG CTAATACAGA
ATCTACCAGC CACATG

## SEO ID NO:2346: (Length of Sequence = 437 Nucleotides)

GIGGAGATIG ATCCTICINI TITTIGITGC CGCTGCTGCC CTCGCGCTGG GAGCCGAGCC GGAGGGAAGG CGGIGGAGAG
ATGATTGCAG AGTIGGTGAG CAGCGCTCTG GGGCTCGCCT TGTATCTCAA CACCCTGAGT GCGGATTTCT GCTATGATGA
CAGCCGTGCT ATCAAGACTA ATCAGGACCT TCTCCCAGAA ACTCCATGGA CGCACATTTT CTACAATNAT TTTTGGGGGA
CTCTTCTAAC CCACAGTGGC AGCCACAAGT CCTACCGGCC ACTCTGCACT CTTTCTTTTC GCCTGAACCA TGCCATTGGA
GGGTTGAATC CCTGCGGAGCT ACCATCTTGT CAATGTCCTG TTGCAATGCA GCAGTCACTG GTCTCTTCAC AAAGCTTCTN
CAAGATCCTC CTTTGGTGAT TGGATACTGG ACATTCA

#### SEO ID NO:2347: (Length of Sequence = 406 Nucleotides)

CCCGGCCGCC GCTTTCCGCC GGGGCGAGAC CCCCAGGTTC AAAATGAGCC TGTTTGGAAC AACCTCAGGT TTTGGAACCA GTGGGACCAG CATGTTTGGC AGTGCAACTA CAGACCATCA CAATCCCATG AAGGATATTG AAGTAACATC ATCTCCTGAT GATAGCATTG GTTGTCTGTC TTTTAGCCCA CCAACCTTGC CGGGGAACTT TCTTATTGCA GGATCATGGG CTAATGATGT

TOGCTGCTGG GAAGTTCAAG ACAGTGGACA GACCATTCCA AAAGCCCAGC AGATGCACAC TGGGCCTGTG CTTGATGTCT GCTGGAGTTA CGATGGGAGC AAAGTGTTTA CGGCATCGTG TGATAAAACT GCCAAAATGT GCGGACCTCA GCAGTAACCA AGCGAT

## SEO ID NO:2348: (Length of Sequence = 363 Nucleotides)

GGCCTTTCAA GNAGCGGCGG ANTICGCCGA CCGCTGTAAG GAGGTACAGC AGATCCGCGA CCAGCACCCC AGCAAAATCC
CGGTGATCAT CGAGCGCTAC AAGGGTGAGA AGCAGCTGCC CGTCCTGGAC AAGACCAAGT TTTTGGTCCC GGACCATGTC
AACATGAGCN AGTTGGTCAA GATCATCCGG CGCCGTCTGC AGCTGAACCC CACGCAGGCC TTCTTCCTGC TGGTGAACCA
GCACAGCATG GTGAGTNINT CCACGCCCAT CGCGGACATC TACGAGCAGG AGAAAGACGA GGACGGCTTC CTCTATATGG
TCTACGGCTC CCAGGAAACC TTCGGCTTTC TGAGNCAGCA GTA

#### SEQ ID NO:2349: (Length of Sequence = 332 Nucleotides)

TCCTCCTACT GATGTCTTC AGTAGATTCA GAAGTGATTG TGGCAAACAT AGTATCTTGA AGGAAGAGAT CGTGTTTGA
TTAGCATCTC CCGAGCCTAG TTTTGTGTTT ATGTTCATGG TATTGAGGAA ATAAAGATCA ATTTGGACTT CTTGCACCTG
TTAATACATC CTAGTTCCTG ACTGCAGCAA AATGACTCTC AGTGCCCCTT TCTCTTCTTA GTGATTGCCT AAGATGACAG
CTTCATTCCC TTTTAATTAT TATCCACCTT CTTCCCCATC TTCANTTGTT TTCTCAAGTG AGGGACTTGG CCTCTACTGG
GACTCCACTG GG

# SEO ID NO:2350: (Length of Sequence = 339 Nucleotides)

GAGATGGAGT CTCACCCCTT CGCCCAGGCT GGAGTGCAAT GGCACGATCT CAGCTCACTG CAACCTCTTC CTCACAGGTT CAAGCAATTC TCCTGCCTCA GCCTCCCGAG TAGCTGAGAC TACAGGCGTG TGCCACCATG ACCGGCCAAT TTTTTGTACT TTTTAGTAGAG ACAGGGTTTC ACCATGTTGG CCAGGCTCGC CCCGAACTCC CGACCTCATG ATCCACCTGN CTCGGCCTCC CAAAGTGCCG GGACCACAGG CATGAGNCAC CGCACCCAGA AAAAGCAAAT CTCTTAGTAT TTTTCCTCTT GTCCAAAAGG TTCTGACCAT GTTCATGAC

### SEQ ID NO:2351: (Length of Sequence = 354 Nucleotides)

AGAAGGACCT GAGTITGTGGC CAACAACAGG CTGCAGAAAG GCAATGCCAT CCTGAAGATT TCTCAACTAA GAGTCTGCAC CCATGACAGC CCACCGAGAC CCTCGCTCCA AGTTTGTGGA GAAAGGGAAC CCGCTTGGCA GCATGTGGAA AGACCCCACG ATGAGCAGCA GACACAGCAA CGCTGCCTCC TACATCTCGA CAGCATCTGT GTAAGACTCG CTAGCATCTG GTGCACACAC TGTATGAGAC AGCAACAGCC AGAACAGCC AGAACAGCA GCTTTACGTT GATGAACACA CAGACGGTGG CGCATGTTCA GAGATGCCGA GGGGACGCCG CAGTTCCCAA AATCACCTCT GGCC

### SEO ID NO:2352: (Length of Sequence = 378 Nucleotides)

GTTGTTTGTT TAGTGGAACA CTCAAATCAA AAACAGGCTC ACGGTCTGAA TAGTCTTCTG GTCTAAGCAA CTCAGCACCA GCGCCCCCAA GGGGAGGCCG CCCTTGTCCT GGCCCCGGGA AGAGACGCAG CTCCAGCCCC GACGCAGACC CCATGGCGCA CACAGGCAGG CAGAGCTCGA GGTNCAGGCG GCTGCCTTGC GGGAAGTCGC TGGGGGAGGG TCCCTNGCTG AGGCTGCACC AAAGGCTNGG GAGAGGCCCA GGAAGGGGAG AGCGAGCTGA GACGTTGGGA TGGTTTNGCA GAGGGGCAGA GCCAAGGNCA GAGGCAAGTT CTNGGGCCCC ACAAGCTTAT GGTTGGCA

### SEO ID NO:2353: (Length of Sequence = 369 Nucleotides)

CIGCCITATA TAATGIGGAT GCIGGGCACA GAGCIGICAT CITIGACCGA TICCGIGGAG TGCAGGACAT TGTGGTAGGG GAAGGGACIC ATTITCTCAT CCCGIGGGIA CAGAAACCAA TTATCTTIGA CIGCCGITCT CGACCACGTA ATGIGCCAGT CATCATTGGT AGCAAAGATT TACAGAATGT CAACATCACA CTGCGCATCC TCTTCCGGCC TGTCGCCAGC CAGCTTCCTC
GCATCTTCAC CAGCATCGGA GAGGACTATG ATGAGGCGTGT GCTGCCGTCC ATCACAACTG AGATCCTCAA GTCAGTGGTG
GCTCGCTTTG ATNCTGGAGA ACTAATCACC CAGAGAGAGC TGGTCTTCA

SEO ID NO:2354: (Length of Sequence = 363 Nucleotides)

GEAGAGGGAT TGGCATCGGC ACCATGGAGC TCCCAGGGCT TAGAGATGGA GCAAAGTTGG CCTCACCTTG GGGAACCATT
CCTGCTCCTG GATACTGGAA GACATTCTGC TGCATCTNAG GATTGATTCC AGTGCCAAAC TGTCCTCCTA TGTTTCCTGT
CATGCCTCTG CTCACCATGC TGTTGCGGTT GGCCAAGGAT GCTTCAGGAT TTNCTGCTAG TTGTGAAAAC GGGCTGGTAG
AAGCAGGTGG GGTTCCTGGG ATTTGTACCA TAGTTTNGTG GATAGGGGAA TTGCTGTGGA GCACCCTGAG GAAGACGGGG
GTTNCCCATT TNAACTGGTA GTCCAGATGA GGGAGGGAGG GTT

SEO ID NO:2355: (Length of Sequence = 403 Nucleotides)

AACCAGGAAT GGAGGCCTC CTCATGTCTG AGGTAGAGTA AGACGGTGTC AGGGGGCCGGA CCCGGGGGCG GAGATGAGCA
CCGGCCGCAC TGGGGCATCA TCCNGGCCCA CCCGGGACGA TGGGCCGTGG GAGGGCTCAG GGCGGTGTGG TGGCCACACT
GCGAAGAATG GATTITIAAA ACACTTCATA GCCCCGANIT INITICAGCT CCCTCTTCGT GGACACACACT TCAGGGCTCC
CTTGTCACTG GCTTTCGGGG GTGGTCTCCC CACTTGCAGA GTCTGGTCTC CACAGGACAC CGTCCTTCCC TTCCCTTCCA
AGGGGCAGGN CCCACGNACC CTCGCCCAAA AANTAAAGGA GCTTTGTGTT TGAAAACGCC AAGGCAAGCC GTCCAAGGGA
GCT

SEQ ID NO:2356: (Length of Sequence = 456 Nucleotides)

GAAAGAAAA CAATTGGTCA AACCACAAGA ACACTGTTAC CTTGAGCCTG AGAAGCCAAT TCAGATTCAA CCCTGAATTT
GGTTGATTTG GATTAAGTGA CGCAAAAAGT CAATAGAACC ATTGANITTC AGAAATCATA AAGTTGCACT ATGCCAAAGA
AAAGAGTACA TGTGAATCAA GCGTAGATAG AAAACATCAA GCCAAGAAAA CAACACANIT CACATAATTT TNTTTGCCCC
GACAAAACAT TTAAGCAGTT AATTTTGTTT TGTTTGTTT TGTTTGTTTT TGAAGAACAN TTGTGGTCTT TTACATTTTC
TTGGTGGGAG AGCAAATTCT GATCAGCATT AGTGCTGTGA AATACTTTTG GNTTATCATC CCCCAAGTNT AGGGTGAGAT
CATGAGGAAA NTTTTGGCAG TCCTTCTCTC AGATTTNGTT CACTNAAANT GCTTGG

SEO ID NO:2357: (Length of Sequence = 412 Nucleotides)

CCACCCATG CCCAACAGC CATATIGICA ATAAATAAGG AATAACIGAA ACCAGACCCT TIAGGAAGAG ACAGAAATIC
CATTACCCAG GAAACCACTC AGTGAAGATG CIGATAGTIC TGATATGTIC TITATGCCCTG CCCCCTTCCC CCAAAAAACC
ACCIGCAGAA CCAAATGTIT CICCTCAAAG CCCATCAGCA CAGATTGATA ATAATATCAC TATCAAGCCA GGGCTAGTGC
TICTCTACAT ACTGTACTGT CACAGGTACA AAGCAAGCCC TGGACAGATA CTGTCTCCCT GCCCCCACAA ATCCAGGGAG
GAAAAAGACC AGGGANGCTT TGATTTCCTT GGGATTTAAA CCTCATGTTC AAAAAGGNTA ATAAAGGTGC TCGTACTTGT
ATCTTCTTCC CT

SEO ID NO:2358: (Length of Sequence = 399 Nucleotides)

AGATGCCACC AGGITCAAGT GGGGCCCCTT GGATGCCTAA GCCTGGGGAC GACTACAGCT ACAATCAGTT TTCCACATAT
GGCGATGCCA ATGCCGCTGG TGCTTATTAT CAGGATTATT ACAGTGGTGG CTACTATCCT GCACAGGACC CGGCCCTGGT
CCCCCCCCAG GAAATTGCCC CAGATGCCTC CTTCATCGAT GACGAAGCAT TTAAGCCGCT GCACGGCCAAG AGGAACCGAG
GGAGAGAGAA AATCAACTTT GTGGAGATCA AAGGTGATGA CCAGCTCAGT GGGGCCCCAGC AATGGATGAC TAAGTCATTG
ACAGAAGAAA AAACCATGAA GTCATTCAGC AAAAAGAAAG GTGAGCAGCC AACAGCCCAG CAGCGCCGG AAACACCAG

SEO ID NO:2359: (Length of Sequence = 352 Nucleotides)

CTTCATTAAC AAGCTGCGAG AGAAGCTGGG TTGCCAGGAC GCCTTCCCCG AGGTGTACGA CAAGATCTGC AAGGCCGCCA
GGACTGAGCT GGAGCCCGCC TGGAGAGACA GACACGTGTG AGTGGTCAGG CATCTTCCCT TCACTCAAGC TTGGCTGCTT
TCCTAGATCC ACACTTTCAA AGAGAAACCC CTCCAGAACT CCCACCCTGA CAGCCCAACA CCACCTTCCT CCTGGCTTCC
AGGGGGGCAG CCCAGTGGAA TGGAAAGAAT GTGGGATTTG GAGTCAGACA AGCCTGAGTC CAGTTNCCCG TTTAGAACTC
ATTAGCTGTG TGACTCTGGG TGAGTCCCTT AA

SEO ID NO:2360: (Length of Sequence = 359 Nucleotides)

TTTTTTCAG CATAGICATC TTAGCTITAT TGAGTAAGGC ATCCCAATCT CTGCTAAGAT TCTNCTAAAT GAACGCCTGA
TTTTCCTGCC AAACTATGCA TTGGTCAAAG AGAAATCACC ACCTGGCCAC CCCATTCTGT CCCCCTACAG GACACTAAGG
GTTCTTACAG ATAAAGGGAC GATGCATTCA TGCCTGGAGA ACTAATCACA CCTGATTTCT CTGGGATCTA AANTAATGTC
AAATTTTGAT TCACTTTATG TAAAGAAAAA TCCTTTTNTT TTTNTGCAAA CCNCTTTCAA GANCAATGCT GCCCATCCCA
TGCAAGATGT TGTTGTAAGG CCANCNTCTG GTATACTAA

SEQ ID NO:2361: (Length of Sequence = 437 Nucleotides)

CTCCAGGATT CCAATCCAGT CCGAACTCAA CACGAGGGGT GGCACCTACA GGCTGGGGTC AATCTGGAAG ACTGCCTGTT
GTATGGCCTG GCAACTAAAA AATGTTTTTT ACATTTTAA ATGGTTAACA AAATTAAAAT AAGAGAATAT TTCATGACAT
CATCAAATTA CACGAAATGC AAATTTCAGC ATCTACAAAT ACAGTTTGAT TGGGACACAG CCACCCTCAT CCGTTTGCAG
GCTATCCCTG GCTGCTTACA GGGTCCACAT AGTCCATAAA GCCTGAGGAT ATTTACTATC TGGCCTTTTA CAGAAAAAGG
TCCCCAAACA CTAAATCTGA AATGTTTTGC ATCAGAACCC CTTGTGGGGC TTGTTAGGAA TGCAGCTCCC TGGTCCCACA
NCCAGTCTCT GGATTCAGTA AGTCTGGAGC AGGCCT

SEQ ID NO:2362: (Length of Sequence = 317 Nucleotides)

CTICTCTGGA TGTGCCTGGG CTTGGACTGG CTAGAATCTT TCTCTGGACT NITGCATGTA CAGTGNCTCC ATCCTGGAGG CAAGAGAGTT GGGAGTGGCT CGAATCANAG CCGTGCCCAA GATATCCCTN CTGTTGCATC GTTTGAAGCT GACGTCCTGT GTCTNTACAC TGCTGCCACT GTTGTNTCCT CGNTCTGCTT GCTGTTGCCT CACGCCAGGN CCCGTCCTGC CGTGACANCC TTCATCCTAC CCTTGGAACC CCAAGGCCAA GTTGGTTCAA ACTGTTGGAG AACAGAGTTG GCCTGCATCT TGGAACA

SEO ID NO:2363: (Length of Sequence = 412 Nucleotides)

GICAGAGINI TGATAGTICI ACIGGGAGAC CACAAAATGA CATGGICCAT CCTCCTCTT ATCCAAAGAT GCATGGITAA
AATAATATAG ATTAGGAATC ATCGITACCT CCAAACAGTI AATTCAATTC AAATTTITAG CCCAGACTGG TITTTAAAGA
CATTITCIGC CAAAATTTIT TGGAAGTAAA CACATTAAGG GIAGGIGIGG AGAACGATTA ATGGATTCAT TITTATACTC
ACATCIGITT TGGAAATATA TITTATGCAA TAAAGCATAA ACTAACAGGT ATACTTATAA ATGTCIGGIT TTAGAAACAC
TAAAAGATCT CCAATCTTAG GAGGCCTTAA TTTGAAACTC TGCTTTTATT TGCCTGAACT AGTGGCTAAC CIGINTAGGC
ATCTCACGAG GG

SEQ ID NO:2364: (Length of Sequence = 334 Nucleotides)

GAAATGATIT AATATTAGGA AAGGCAAGIN CCTCGAGACA TITATITAAG CTAATCTGTC CTTGATTITT GACTITCAGA
TTCATTACAC CCAGCCACAT TAGCCTGCAC CATTAAAAAC ATTGATTCAA CCTCTCTTAT TGGCATAGAC AATACATCTG
CCTTGITCAC TACTCTATCC TCAGCTTGGT ATTTCTCTAG CACAGAAGAA TGGTCCAGTA GATATGCTGA AGAAATACCT
GAATGCATAA ATAAATAAGA AAATGAGAGA CTGAATGANT CAATTAATAC CTCAAGTGTT ACCCINGATA AGGTTCTAGA
GAGGGGAGGT TCTA

SEQ ID NO:2365: (Length of Sequence = 423 Nucleotides)

TITITIGCCA TITAATAAGI ACTITATIGA TATIATATCA CACAGCACTI TACAGTATAC TCAAAGATAG CCTAAATTAT
GAATTAAACA TGCAAATATI TNCITTICCA AAATGIGGAC AAAATGICIT TITAGAGGCT TITGAACACI AGCCTTAGCT
ACTAAGCATI CATGGGTITG ATCITICTIG CGACATGACT TITAAGTAAGI TAACAAAAAA TGTAGCTGTA GACAGTAATT
GITTGATAAA TATGANCAGI TITAAAATGG CACTGAATTI ACATCITTAA TCATTITAAT AGGGCCATCC ACAGCCTCTC
TIGTGGCTCT AATTCICAAC CICCGGGTC TITAAAGGGC TGGTAAAGGC TCAGAAAGTG NCCAGCTCCA TGTGGGGTCT
CTGTAAGENG TCTATGTCTT CAT

SEO ID NO: 2366: (Length of Sequence = 294 Nucleotides)

SEO ID NO:2367: (Length of Sequence = 393 Nucleotides)

ACGGACAGAG CGAAGGGGAG AGGATGGTAG TGTCTGACTT CCACGTTTTC GTCAGGGATG TGTTGCAGCA TGTGGATTCC ATGCAGAAAG ACTACCCTGG GCTTCCTGTC TTCCTTCTGG GCCACTCCAT GGGAGGGGCC ATCGCCATCC TCACGGCCGC AGGAGAGGGCCG GGCCACTTCG CCGCCATGGT ACTCATTTCA CTCAGGCTTGC TGCGAAAGTG CTCAACCTTG TGCTGCCAAA CTTNTCCCTC GGGCCCATCG ACTCCAGGGT GCTCTCTCGG AATAAGGACA GAGGTCGACA TTTATAACTC AGACCCCCTG ATCTTNCCCGG GGCANGGGCT NAAGGTGTGC TTT

SEO ID NO:2368: (Length of Sequence = 187 Nucleotides)

GATCTIGAAG TIAAACCAGI GITAGAAGIT TIGGIGGGGA AGACAATINA GCAGICTCTI CIGGANGIAA TGGAAGAAGA AGAGCIGGCI AACCIGGGG CCAGICAGGG IGAGIATGAA GAACIACGGA ATAGIGAACG TCCIGAAGIT CAACGACITG NAGAGCAAGA NAGGCGACAC CCAGAAG

SEO ID NO:2369: (Length of Sequence = 341 Nucleotides)

GIATCITIAG TAGAGGCGG GITCCACCAT GITGGCCAGG CTGGTCTCGT ACTCCTGACC TCAGGTGATC ACCTGCCTCC
TCGGCCTCCC AAAATGCTGG GATTACAAGC GTGAGCCACC GCGCCTGGCA CCATCAGTTT TTGATCCTGA TACTTGTCTG
TCCTCTTGGT TCTCCTCATC CCTAATTTAA CCTTGAACAC AAAATTCAAC AGGTTTTGGC ATATAGAATA AAGATTATCA
GGCAAAGGCG CACTCTTGAC CTAATGATAT ATCTACATTT CATTTCCTGA TCTATCAGCA ATATTTAATT TGTCTAGAAA
TGATGAGAAG TTTAGAGGAG G

SEQ ID NO:2370: (Length of Sequence = 337 Nucleotides)

AGATCAAGAT CTCTCCCAAA ATGCCAGTAT GCAAAGGACA CTTGGGGCAG CCTCTCAACA TTTTCTGCCT GACTGATATG
CAGCTGATTT GTGGGATCTG TGCTACTCGT GGGGAGCACA CCAAACATGT CTTCTGTTCT ATTGAAGATG CCTATGCTCA
GGAAAGGGAT GCCTTTGAGT CCCTCTTCCA GAGCTTTGAG ACCTGGCGTC GGGGAGATGC TCTTTCTCGC TTGGATACCT
TGGAAACTAG TAAGAGGAAA TCCCTACAGT TACTNGACTA AAGATTCAGA TAAAGTGAAG GAATTTTTTT GAGGAAGTTA
CAACACACAC TTGGATC

SEO ID NO:2371: (Length of Sequence = 320 Nucleotides)

CGTGGCCGCA GAGGCAGCTG AGCATGAGGG ATGGAGCGTG CTGCTGTCCT GCAGGTGCCG TTAGCCCTGT TTTGCACTGG
TGGATTGATC TGCTCAGGCG CACAGGGAGA TGGCACAGCA GGACCCGCCG CCCAGCCTCG CTGAGGGCAT GCTCCCGCCT
CACCTCCAGA GGCTGTTGGG CGGAAGCGAG AGCTGCAGCA GTTGGGGCCA GCNTGGGACT GGAGGCCCAG GTGAATCTTG
TGGGGCAGGG GACGGAGCTN AGGCTGTCCG GCCCGGGCCC TTCCCACCCA AAGGCCCTAG AACCCTAGGC CTTCAATCCT

## SEQ ID NO:2372: (Length of Sequence = 326 Nucleotides)

AGGCCIGGCA IGCGGCGAAA AGIICCIGGA GAAGGCCICC CCCTCCCCAA AACACCCGAG AAACGIGGGG ACCTCATIAT
TGAGIITGAA GIGATCIICC CCGAAAGGAT ICCCCAGACA TCAAGAACCG TACTIGAGCA GGITCIICCA ATATAGCTAT
CTGAGCTCCC CAAGGACIGA CCAGGGACCT IICCAGAGCI CAAGGATITC IGGACCIITC TACCAGIIGI GGACCATGAG
AGGGIGGGAG GGCCCAGGGA GGGCITTCGI ACINCIGAAT GTITINCAGA GCATATATTA CAATCIITCA AAGICGCACA
CTAGGA

## SEQ ID NO:2373: (Length of Sequence = 361 Nucleotides)

AGCAGAGCTG AGGGAAGGCG TAGGATGGCT CCAGCTTCCG GTCAGTGGCT ACATGGTCAG TTCCATGATG GCGTTGACGA
TGTCACTGTG GTTGTNTCTC AGAGCCCGCA CGGCCTTCGC CCTCGACACA TTGGCCTGCG CCATCACCAG CTCAATGTCA
CGCAGTTCCA GCCCCGCCTC GTCCACCTCT TCCTCCTCCT CCTCTTCCTC TTCCTTGCAC TCCAGCCTCA CCCGGGGCCT
GGGTGCTGAC
TCAGGGACCA AGGCTGAGGG CTCTGAGGGA ACCTTAAACT TCTCAGCTGC GGCTTTGTGC ACTTGCTGGG
ACAAGGTCCT CAATCTTGGA CTCGCCAAAG ACCACATAAG T

## SEO ID NO:2374: (Length of Sequence = 281 Nucleotides)

TGACTCTAGT CIGGCACTTA TIGATGACAT TGAGAGGCTG AAATATGAAA TINCAGAGGT GATGACAGAG ATCGACAATC
TAACTTCCGT AGAGGAGAGC AAAACGACTC AGAGGACAAA ACAGATAGCC ATGGGAAGAA AGAAATTCAA CATGGNTCCC
AAAAAGGGAA TICAGTITCT AATAGAAAAT GACCTGCTAC AGAGTTCCCC AGAAGACGTC GCCCAGTTCC TITATAAAGG
AGAAGGCCTA AATAAGACCG TCATTGGGGA CTACCTGNGG T

## SEQ ID NO:2375: (Length of Sequence = 391 Nucleotides)

ATGITTAGIG CITCCTICAG GASCICIGGI AGGSCAGGIC IGGIGGIGAC AAAATCICIC AGCATTIGCI IGICIGIAAA
GGATTITATI ICICCTICAC ITATGAAGCI CAGITIGGCI GGATATGAAA ITCIGGGIIG AAAATTCIIT ICITTAAGAA
IGITGAATAT IGGCCCCCAC ICICTICIGG CIIGIACAGI ITCIGCIGAA AGATCIGCIG ITAGICIGAI GGGCTICCCI
ITGIGAGIAA CCCGACCIIT CICTCIGGCI GCCCITAACA ITTIINCCII CATITCAACI ITGGIGAATC IGACAATTGI
GTATCTIGGA GIIGCTGIIC ICGAGGAGGC AACCITTGIG GGCGITCTCI GTAATTICCC CGAATTIGAA A

#### SEO ID NO:2376: (Length of Sequence = 324 Nucleotides)

CCAGCCCTCC CTCAGCTGGG AACACAGCCA GGTGCCCTCA GACCCCTGGN TCTGCACAAG GGGGGCCTGC CCCCTGGCCC CAGCTATATA CACGACAGCC CATCCTGCTG GCCGTGGACA AAAGCTGGGA GCTCCTGTGC CCAGTCAGGA GCCCCTACAG TCCACCAGCT GCGCGGCCGG GTCCAGGGGC CCACTGTGGT GCCAGCNAGT TTNTCAAAAC CNAGGGCCCCA GCCCCAGCTG GCNCCTNGCC AAGCCCCAGG CCTGTTTGCT GGGATGGAC CTCCACACTG AGGCTGGTAA AAGCTTGAAC TCAACAGCAG CAAT

## SEO ID NO:2377: (Length of Sequence = 357 Nucleotides)

GTTTATGTT TTATTTATGT ATTITAACTG ACTIATTTGT GTATCCCACT AGAACAATAC ATTICACAATA TACTTGCAGA ACTIGTGCCTG GTGCGTCATG GGAGCAGAGA ACTIGTCCAG TGAATAGTTG TTGAAGAAAG GAGTAAAATC TCCCCCAAAC CCTAAAGGCA TOCTTITOGT AGIGIGIGIC CCATAGGIAT GGCTGCIGAG CACCAGGGCT GCTCACCATG CTCCCAAGAA GCAGAGTCAG GGAGGCAGAC AGCAGGGITT ATTAAGGIGC ACACCCATGT CTGAGCCCCA GCTCTCTCCG NCTTCTGTGG GGAGGAAGCC CTCCGGTCTT TCCGAGGAAC CTTCAAA

### SEQ ID NO:2378: (Length of Sequence = 454 Nucleotides)

GACGGGTCTT TCAATAGCAA GTTTTCACTT CATCGACAAC ATCACGAAGG TGGTAACAAA CAAATGCTTT ATCAGGCTGG
ACTTCATTTC AAACTCCCCC AAAGCACAGA TCCATTACGC ACATTTAAAG ATACCATCTA CCTTACTCAG GTGATGCAGG
CCCAGTGTGT CAAAACAGAA ACTGAATTCT ACCGCCGTAG TCGCAGCGAG ATAGTGGATC AGCAAGGGCA CACGATGGGG
GCACTTTATT GGCAGTTGAA TGACATCTGG CAAGCTCCTT CCTGGGGCTT CTCTTGAGTA CGGAGGGAAA GTGGAAAATG
CTTCATTACT TTGCTCAGAA TTTCTTTGCT CCACTGTTGC CAGTAGGCTT TTGAGGAATG AAAACACGGT CTATATCTAT
GGGTGTGTCA GATCTTCACT CGGATTATTC GATGACACTC AGTGTGAGGA GTCC

#### SEQ ID NO:2379: (Length of Sequence = 224 Nucleotides)

GGAAGAGACC TCACAGGINA TTAAANGIGI ATTTINIGGA CCTGGGCTTG GCTGGAATGC TCAGGGGTCC TGAAGATCCT ATTATAGCTT CCTTCTGTTG AACCATTAAG AAAAGATGGC GANAGTCAAC ATAACTAGAG ACCTCATCCG TAGNAGATCA AGGAGCGGGG TGCCCTTAGC TTINAGCGGC GCTACCATGI CACTGINCCC TTTATCCGGC GGCT

### SEQ ID NO:2380: (Length of Sequence = 274 Nucleotides)

AGGITIGAAA TATCITITIG CAATAGATAA TCTTATITAC ATTAATACAG AATCATITTA CATICCTAAA TCAGACACTA
ATAGATGCIT TATTITAGIG AATTATAAAG GAAAACAAAA AGGAAACTGI TGAGAAGIGI TCTICATTAA CCNGICTAAC
GNCAGCCCGA AGATCCNGNA ACACATGGAA ACIGCGNCAT GCINCCNGCA GAGGCTGGGG AATGGGGGIT CIGCICTCAC
TGAATGGIGG GGAACCTTCA ACIGCTTAGC CIGT

## SEQ\_ID\_NO:2381: (Length of Sequence = 312 Nucleotides)

GCACAAACAG TITTATITGA TGANCCACAG TGACTAACAG GNTCAGAAGA CAGTGCAGAT ATTCTGAAGA AGGCACTENG
GGAGGTAAGG GGGTATCACA GCAGGCAGCC TCCTCTGNIT CTNTCCCAGT TCACAGATGA GTTCCAGGCA GGAAGTCTCT
GCAGGTCACC CACGGCGGCC TCAGAGGGGAC AATTINITCC CTTCTAGAAG CCTNTTCCAG TGTTCACTGG ATGNTTTGAG
GACAGNTCTG GGCAGAGGAG GTGACTCTGT GAAAGATGCT ATCTTAAGAT GGGGAGACTA GGCTGTGAGG AG

## SEQ ID NO:2382: (Length of Sequence = 402 Nucleotides)

CTTAAACTAA CITTGAAGCA AGTAATGTCA ACTITGAGCA CITTGITGAG TITTGAAAAA TCTTATTTGI TGCTGCACAG GTTAATAAAT TATCAATTTG TAATTCAGCA TGTTGGTCAG AGACACGGTC ACTGATTCAC ACCCAGTCCC TGCCACAGAC CGTCTCAGACA ACGCACAGTG GGCCTGCTGC ATGATTCACA CCCAGTCCCT GCCACAGACC GTCTCAGACA CGCACAGTGG GCCTGCTGCA TGCGGGGTTAC CTGGCTTTTG GCTCCACGCT CACTCATAGC CATGTCCACA TGCGGGGCTT GCACACAGGA TCACTCACAT ATGTACATGT ACCCACCACA AACGTGCAAA GCTCCTTGCA CACATGCATG CACACAAACG TGGTACACAA GT

## SEQ\_ID\_NO:2383: (Length of Sequence = 406 Nucleotides)

GACCCITITC ACTIAGCCCI CITGGGTTIG CAACATGCIT TCTCTCTCAC CITCTCATTG AATGAGAAAA AACAGCCCAG CCATTITITIG CAAACAGCAA AGCACCAGAG TGATGATGGC TTTGCTCATC TCACTTGACT TTCACAGTAA CTCAGTITIGA TGTAGGCAGT CCAGGCATTA TTATTTTCAT TTTACAGATG ATGCAACTGA GGCTCAGTGI GGIGAAACAT TTGGCTCATA GCCACACAGC TGATAAGCAT CAGGGACTTG GGACCTAGGA CTTCACATTT CAAGTCAGCT GTATCTGTCC CCAAGCCCCA

CCAGACTTCA TGTGAAGGTG GCTGCTTCTG GGGTGATGGT GGCTGGAGAG GCAGACTTTG AGGCTGCCAT GCTCTTAȚTT
TCAGAT

### SEO ID NO:2384: (Length of Sequence = 165 Nucleotides)

TTAAGACAAT AATGAAAGAT TCTGTACAAA GTTACCAAGT CTACAGGCTG AGCGAGCCAA GGGTAAGTGG GGCCTGATCC TTGTGGACGA ATGTNCCCGG GAGAGCTGGC CTCACCTGGG GGAGGCACGT TGAAAAAGTA CACATTTACA GGGCTCGGGA AAGGC

# SEQ ID NO:2385: (Length of Sequence = 297 Nucleotides)

GGTTTINATT CATTCTCTC TATTAACCTC TCTAAAGGAA ATTGGGCACC TGTAATCCCA GCACTTTGGG AGGCTGAGGT
GGGTGGGTCA CTTINAGGTC AGGAGTTCAA GACCAACCTG GCCAGCATGG TGAAAACCCA TCTCTACTAA AAATACAAAA
MITAGCCAGG CTGGTGGTG TCGCCTGTAA TCCCAGCTAC TCAGGAGGCT GAGGCAGGAG AATTGTTTGA ACCTGGGAGG
CGGNGGTTGC AGTGAGCTGA GATCGTGCCA CTGCATTCCA GCCCAGGGTG ACAGAGT

## SEO: ID NO: 2386: (Length of Sequence = 290 Nucleotides).

AAAAAATAAA GIGAATTIAT TEGITCATGT AACIGGAAAG TCTCATGAAA ATGICAGCTT CAGGAGAAGC TTGACCCAGC
AGCITCATGA TGIATGGAAA TACCTGGGIT TITTGITTCT NCTCTGCTAC TGIGGIATCA GCTTTATTCC AAGICTGGCT
TCCTTTGITG TIGCAAAATG CTTTGICAGA AGAAGCCTGG GTCCATCTGT TAGGNITAAG TTTACTCTGT ATGCTGTAGT
AGTGGCTATG ACAAGATTAG GAAGTGTATT TTCTCCTCCC ATATTAAAAG

### SEQ ID NO:2387: (Length of Sequence = 356 Nucleotides)

GTCATCTGTA TIGTCACATG AAATGCACAT CCAAAACGGG TGACTTGGAA ACGACCTATT AGGTCACACG GAGTCCGGCC CCTGGGGGCA AAGCCTCATC GATGCCCACG GGCGGTGGCC AGCACTTTCC TTGGGCTGTG GCGTGTGCAC CCGGCCTCCC CAGCGGAGAG TCAGCTCACA CCCCAAGGCC TTTAGCTCTC TGGCAGCAGC TCCCAAAACG CACTTGAGGA ACCAATAATT CCTTGGGGGT TAATAGCTGT TCCCCAAGAA AAGGGTTCTG TGGGTCAAAT AAGTTTAGGA AAACATGGGT TAAAGAAGGT TTAGGCCAAGA AGCTTTTCTA TAGGGCTTTG TCAGAG

### SEQ ID NO:2388: (Length of Sequence = 226 Nucleotides)

ATTATTIGGTA TAAAAACTTA AGACGGCATT AGAATTCTTA AGAAAAGGTG TAAAATTTAA AAAGATGTGC AAACAACAAA GAATGCCCCGA CCCTGAACCA GACCTAAAGC ACCTTCCANT TCCTCCACAC ATCATGCCCC AACACCATCC AGCCCAATCG GACACCAGGA CAGTGAGGGA CGGGTGGCTG TTCAGTGGGC AACAGATCTG GAAGGAAAGA TTTTCA

### SEO ID NO:2389: (Length of Sequence = 250 Nucleotides)

CCCAGCTAGG CCTTGGNATG GCINCAGTGA GGAGAAATCC CGGGAACTGT ATTGACACAA AGATTCINAT TGCACTTGTA
TTTTTNTATT AAAGTTTGCA TGGTTTCTAA TAAAGGATTC AAACATAAGT TTGTAGTGAA ATGGCCTGGN AGATTCCAAG
GGCTTCTCIN GAAGGGGGAT TGNGCTGCAN TGTAGATTIN CCTCTGAAGG AGGCTGGCCC CAAACTTGGN CCTCCTCATG
ACCCCCTCCT

# SEO ID NO:2390: (Length of Sequence = 371 Nucleotides)

CCTTTTCIG GAGAACGGG TCICGCTATA TTGCCCAGGC AGGICICGAA CTCCTGGGCT CAAGCTATCC TCCCGCCTCT NAGCCTCCGT TTCCAGAAGG TCACCAAGTA ATATCTGCNT TTCATCAGTT GCAGTTAAGA TTTTNNITTIC TTGAAATACT GGITTTCAAA CAGATCAGAA TTACCTGGGG AGCTTGITTA AAATATAAAT GCCCCAAGGC CAGCTCCAGG ACATTCTGAC

TOCATAGGIA TGTGGTAAGC CCAGGGAATC CAGGTAAGCT CAGGTAAGCC CAGGGTAAGC CAGGGAATTG TTAACAGGAA GCTGGTGGGT TTCTGGCACC TNGACANGGA CTGAATTCTA GGTAGCTTGC C

SEO ID NO:2391: (Length of Sequence = 200 Nucleotides)

CAGTICAGCA GOCTATGAAA TITGITGGGC ATATAAANAA CTGGAACTIT CAACAGGGIG GITTIGAAAC TAGNGCATTA ACCAATAAAT GNCAAACCCA CAAGGACAGT GCATTGIGIC ACATAGANGA TCTGGAAAGT ACAGCIGTAA ACTATAATCN CCAGTCTCTG AGITTAGCACC TTTCCACGNT AGTCTCTTAC

SEO ID NO:2392: (Length of Sequence = 234 Nucleotides)

TOGCTGAGGT GITTGGTTTG GAATAGGGAA AAAGGTAAGA GACTAACGTG GAAAGGTGCT AACTCAGAGA CTGGAGATTA
TAGTTTACAG CTGTACTTTC CAGATCTTCT ATGTGACACA ATGCACTGTC CTTGTGGGTT TGTCATTTAT TGGTTAATNC
TCTAGTTTCA AAACCACCCT GTTGAAAGTT CCAGNTATTT ATATGCCCAA CAAATTTCAT AGCCTGCTGA ACTG

SEO ID NO:2393: (Length of Sequence = 337 Nucleotides)

TOCAGAGGGG GATTCAGAAG AAAGGAGATC CACATGAAAT GAAGATCACC TCTGCCTATC TACAGGACAT TGAGAATGCC
TATAAGAAAA CCTTTCTCCC TGAGATGAGT GAAAAATGTG AGGNTTTACA GTATTCTGCA AGGGAAGCTC AAGATTCAAA
AAAGGTGGTA GAGGACATTG AATACCTGAA GTTCGATAAA GGGCCGTGGC TCAAGCAGGA CAATCGCACT TTATACCACC
TGCGATTACT GGTTCAGGAT AAGTTTGAGG TGCTGAATTA CACAAGCATT CCTATCTTIN TNCCGGAAGT CACCATTGGA
GCTCATCAGA CTGACCG

SEQ ID NO:2394: (Length of Sequence = 211 Nucleotides)

CAAATGITTA TITTATATAC AAAGAATTAT CATGGITTIN CATIGAGIAG ATGCCCCGGA TAATCCICTG AAGGAAGAG ATTTAGICCA ACTTAATGAA ACCGATATCC TICGCGTACT GACGGAAACA CTGGCGGCAC ATATTGAGGC CATATTICCG GATCANACCG TGCCGGTTIG AACAGACACG ACAAGAGCGA GAACCCTGCC C

SEQ ID NO:2395: (Length of Sequence = 335 Nucleotides)

CTGAAAGCTG TAACACCCTC AGGTAATAAC AAAAGGGATT TTTATTTCAC AGCTAAAGGG AAAATAGGTG GAGAAGTTAA
AAAATAATGT CTGATCCTGT TCCTAAGTTC CAAACTATAG CCAACACTCT GATGCTGCTC TTTTTCTTGT AGGACCAACC
GTCCCCAGTTT GCCTGGGACT TTCTCATTTT TACAGAGTCC CAAATCCTAG GAAACTGGAG CAACTGGTAC AACTGGTCAC
CTACTCTTGC CCCTCTGGTA AATCAAGNCA ACTGTGACCA TCCAATGTGC CATCTTACAG GGNAAAGTTA TAACCCACTA
TTCCCCTATA ACATA

SEO ID NO:2396: (Length of Sequence = 223 Nucleotides)

AGGGAGATCC AGCTCCGTCC TGCCTGCAGC AGCACAACCC TGCACACCCA CCATGGATGT CTTCAAGAAG GGCTTCTCCA
TCGCCAAGGA GGGNGTGGTG GGTGCGGTGG AAAAGACCAA GCAGGGGGTG ACGGAAGCAG CTGAGAAGAC CAAGGAGGGG
GTCATGTATG TGGGATTACA TTTTTTTTTT AAAGAAAGAA TAAATTAATT GTGATTAAAG TTG

SEQ ID NO:2397: (Length of Sequence = 379 Nucleotides)

CCATTACAAA GAATGIGGCA ACTIGCTINI NCCTAAAAGG AGGAATTGGA ACTAGAATGI GIGACTCIGI GGGGACTGCA
TAGGITTGIT AATTGACCTA TAGCIAAACC TIAATGIGIT TGIGIGICIA TACATTGCTT TCCGCATTIC AAGACATCCA
GACGCTATTA CCAACATTIT CCIGIGCATT AACCICIGCA TGIGAAAACT TITAACAGIT ACTGAACTAT GIAAATATGI

GAATTTITT ATTAGGIGG ATGCATTTIT NGICTGITTA CIGCTCTTCT CAGCTTTATT CAATAAACTT GCATTTTAAG
GGTTGTATTG GCAATTTTAA CITAAAATGT GCATCATGAT GGAAGGTGCA GACCTTTTT

SEO ID NO:2398: (Length of Sequence = 421 Nucleotides)

SEO ID NO:2399: (Length of Sequence = 392 Nucleotides)

GATAAGCTTG ATATCGAAAG TNCCACAATG GGTCAGCTGT ACCAGGAACA CCATGAAGAA GACTTCTTTC TCTACATTGC
CTACAGTGAC GAAAGTGTCT ACGGTCTGTN AAGCTGCTGC CCCTGAGCTG GAGGGGGGTC TCATTCTACA AAGAGAGAGG
TGGCCCCCCT TTCTTGACCT CCTCCTCCTT CAAGCTCAAA CACCACCTCC CTTATTCAGG ACCGGCACTT CTTAATGTTT
GTGGCTTTCT CTCCAGCCTC TCTTAGGAGG GGTAATGGTG GAGTTGGCAT CTTGTAACTC TCCTTTCTCCC
TTTCTCTGCC CGNCTTTCCC ATCCTGCTGT AGACTTCTTG ATTGTCAGTC TGTGGTCACA TCCAGTGGAT TG

SEO ID NO:2400: (Length of Sequence = 366 Nucleotides)

CTGGGGAAGG ACTGGCACAA GTTCTGCCTN AAGTGCGAGC GCTGCAGCAA GACGCTGACG CCCGGGGGC ACGCCGAGCA
TGACGGGAAG CCGTTCTGCC ACAAGCCGTG CTACGCCACC CTGTTCGGAC CCAAAGGCGT GAACATCGGG GCCGCGGCCT
CCTACATCTA CGAGAAGCCC CTGGAGGAGG GGCCGCAGGT CACCGGCCCC ATCGAGGTCC CCGCGGCCCC AGCAGAGGAG
CGGAAGGCGA GCACCCCCC GAAGGCCACA GCAGAGCCTC CAGTGTCACC ACTTTCACCG GGGAGCCCAA CACGTGCCCG
CGCTGCAGCA AAGAAGGTGT ACTTCGCTTG AGAAGGTGAC GTCTCT

SEO ID NO:2401: (Length of Sequence = 385 Nucleotides)

SEO ID NO:2402: (Length of Sequence = 392 Nucleotides)

AAAGAACTIG GTATCTCTAT TAAAGTACAT GANCCTCCAA GGAAAATAGA GCGATTTACT CITCTCCAAT CAGTGCATAT
TTACAAGAAG CACAGAGTTC AGTATGAAAT GAGAACACTT TACAGATGTT TAGAGTTAGA ACATCTAACT GGAAGCACAG
CAGATGTCTA CITGGAATAT ATTCAGCGAA ACTTACCTGA AGGGGTTGCC ATGGAAGTAA CAAAGACACA ATTAGAACAG
TTACCAGAAC ACATCAAGGA GCCAATCTGG GAAACACTAT CAGAAGAAAA AGAAGAAAGC AAGTCATAAA GCCTTCAGGG
AGGCCATTTT TGCCTAAATT TTGAAATGAG GGTGGGCCCAG ATGAGTATGT TTAAGTGGAG AGTGCTTTCC AG

SEQ ID NO:2403: (Length of Sequence = 179 Nucleotides)

TCATTAAGIT ATACTCTIGG ATAGGAACAC TGAGGAAAAA TGAAAGATGA GATTTGCAAT AGGGATTCTC TAATTCTCAT GITAATCTGT TITGTACCAT TTTTACTTTG TCTTTTGTGG ATCTCTTCTT TTTATTAGAT GATATTAAAG GGGATTAAAG TTGTATTGTA TGAAATGTC

# SEO ID NO:2404: (Length of Sequence = 399 Nucleotides)

TTCCCAAAGT GGTTGTAACA TTTTACACTC CTACTAACAG TGCATGGGAA GCCAGTTTCT CTATATCCTC TCCAACATTT GGTGCTGTCA ATCTTTAAA ATTTTAGCCA TTTTTGTGGT TGTATAGTGT TATCTCATTG CAGTTTTAAT TTGCCGATCC CTGAATGTGT GTAGGTGT ATATGTATTA TATAATATAT ATATNATNCT TTCACTTATT TTGAAGTAAT TTCCAAAGTTTT CCAGGAATAAT ATCAAGAACT CCTGTACTCC CTTCGCCAGA TTCTCCAATT GTAATGTTTT ATTGCATATG CTCCATTGCC CATTCTCCTC TCTACTTATA GCTTGCATTA GTGTTTTCCT GGAACCNTTA GAGATGAAGG TGGAAAAAAG GATGCGGGT

### SEO ID NO:2405: (Length of Sequence = 404 Nucleotides)

GGAACAGAGT GACCTGACCA CCCTAACATC AGCTGCATAC CAGCAGAGCC TGACTGTTCA CACAGGAACT CATCTCCTCA
GCATGCAGG GAGCCCTGGA GGACACAATC GCCCAGGCAC CCTCATGGCA GCTGACAGAG CCAAACAAAT GTTTGGACCC
CAAGTGCTTA CGACCCGGCA CTACGTGGGC TCAGCAGCTG CTTTTGCAGG GACACCAGAG CATGGACAAT TCCAAGGCAG
TCCTGGTGGT GCCTATGGGA CTGCTCAGCC CCCACCTCAC TATGGGCCCA CACAGCCAGC TTATAGTCCT AGTCAGCAGC
TCAGAGCTCC TTCGGCATTC CCTGCAGTGC AGTTACCTAT CTTCAGCCAC AGCCACAGGC CTATTGCTGT GCATGGGCCA
TTTTT

#### SEQ ID NO:2406: (Length of Sequence = 280 Nucleotides)

AAGAGAGAAC ATTITATITG TCTATAATTA GGGTAAACAG TTGGGTAAAA YCTTACTAAA AGAAAGTTAA GGTTGTCTTA
ACACAAGATA TATAATCACA TAAATYAGIT AATTAAATTT YAATTAAAAM CAGCTGCTTT GGAAATCCAA CATGTATACT
TCAAAATAAT TTACCTAAAT AACTTATGAA AATGGATGTT ATTGTACAAC TCATCTCTCC TTATAAAAGG NGAACAAAGG
ACATAGGAAA GCTGAAAAGA AGGCTAGATG AAGATACAGG

# SEO ID NO:2407: (Length of Sequence = 350 Nucleotides)

TOCAAGGGCA ATATAAATTA CAGTATGCAA AACATACTGA CTGGCTGAGG TAAAACGCAC TGCTCCTGCC TCACGTCACC
ATGAGGGGAA ACACACATAT GCTTTTAAAA ACATCTGGCT TATAAAAAAA CATCCCCTAG AAAGGCCTCC AGAGAGGGGC
TGTGAGGCTC ACCCTCTGCC GCGCTCAGGA GGACCCGCCG GCTCAGCCCT GGCCCCTCCA CTGCAGCCAT GCGTGGCGCC
TCCCCCTACT GCCTGCCCAG GGCTCTGCC AGGTTGCTCT TGATGGTGTC GAGGAAGTCC GTGGTGTTCA GGAAGTGCTC
GTTCAGCTTC ACATTGCTGA GGCCGTGAAT

# SEQ ID NO:2408: (Length of Sequence = 239 Nucleotides)

ATMENTITICE GETICECNAGA AATGEATETE CEGAAGAAGA AGAAGAAAA AAATCAGCAG CTGAAAGANC CAGAGGCAGC AGGGCCTGTE GEGACAGAGC CCACAGTGGA GACACTGGAG CCTCTINGNAG TCCTGTNCCC GTCCACCACC AAGAAGAGGA AGAAGCCCAA AGGGAAAGAA ACCTTCGAGC CAGAAGACAA GACAGTGAAG CAGGAACAGA TTAACACTGA GCCTCTAGA

## SEO ID NO: 2409: (Length of Sequence = 331 Nucleotides)

TCTCTTCAGA AATTTCAGAC CAATCGACCG TCCTGTCTCT TTAAGGCTTA GGAAGAGCAG TGTGGCTGCC CCTTTAAGGA GGCGTTGCAA CAAACCATAT TGGACAGACG ATGGGGGGCGA CCCATCGGGA CCCGACGGGC CTCTGACTCC AGCAATACAG CGAATCAGCG GCTTTCGGGA ATACATTTTT CGGAAAAAGA CTTCTTCCTC GGTTTTCTGC TCTGCACACG TTGAAATTTT CCCCAGTITT TCCTGCAGAT CGGGAGTCGA GCAATGCCTA CCCCCGCCTC CCGCACCAGT TGGGCGCTCC CGGATGATGC CCTACCCCTT T

SEO ID NO:2410: (Length of Sequence = 135 Nucleotides)

CTGCAGGACT TGCGAAGAGC GTGCATTCCC AGTGGGCGAA CGGGAATTCG AACGGAGAGA GGGTTATCTT GTGGGGGGGCT ACCCGTGGAG AGCAAGGCGC CCCCAGGGGT TGCATCGGTG AAATTNAGGT CGCCC

SEO ID NO:2411: (Length of Sequence = 330 Nucleotides)

ATGCTGCTCG GITCTCTTGT CCCCCCAACT TTACCGCGAA GCCCCAGCCT CAGAGTCCCC TCGTTTCTCC TTGGAGGCGC
TGACGGGTCC AGATACGGAG CTGTGGCTTA TTCAGGCCCC TGCAGACTTT GCCCCAGAAT GCTTCAATGG GCGGCATGTG
CCTCTINTCTG GCTCCCAGAT CGTCAAGGGC AAATTGGCAG GCAAGCGGCA CCGCTATCGG AGTCCTCAGC AGCTGTCCCC
AAGCTGGAGA AGCGACCCTG CTGGCCCCCT CAANGGAGGC AGGAGGTGGA CTCACCTGTG CCTCAGCCCC CCAGGGCACC
CTAAGGATCC

SEQ ID NO:2412: (Length of Sequence = 583 Nucleotides)

TECACCEGTE CACCAGGTEC CCGTGTGGAT TGINACAGNI ACGTGGGTINA TGAAGGTAAC CACCTACCGII GTGCACGTGG
CCNAGCAGCA GGACGTGCAC CTGACTGTINA CGGAGTCTCG GCAGCATGAG CTCTCGCCAG ACTCGAACTT GCCCGTGCAG
CCCCTCACCA TCCGTGTGGC CAGCACCAAC CCTGCTGTGC AGGCCTTTGA CATCTGGCTG AACTCCACTG AGTACGGGGA
GCTCTGCGAG AAGCTCCGGG CACCCATCCG CAGGGCAGC CATGTGGTCA TCCACCAGAG CCTGGGCGAC CTNTINNTGG
AGACATTTGC CTCCCTGGTA GAGGTCAACC CGGCCTACTC AGTGCCCAGC AGCCAGGAGC TGGAGGCCTG CATAGGCTTG
CATGCAGACA CGTGCCAACG TGAAGNTGGT GAAGACCTGC CAGGAGTCAG CCACAGGGGA GTTCCAGCAG TNITAATTINC
CGCCCCATGT TGGTGGCTTA ACTTGATNGG GAAAGTGGNT TNGNCAAGCG GCAAGACCCC CTTGGGNCTT NAAACTTGNT
TGGCAAAACGG GGTNCCTGCA TGG

SEO ID NO:2413: (Length of Sequence = 203 Nucleotides)

TOGTICCTCCC ACCCCTAGC CATGCAGNEG TGAATNGGGG AACCCAGGNN GGGGGCTGAG AAGCTCCAGG CCACCTTNAG GGAATCCACG AGGGTCTTTC TACCAGGAAG AAGTGCCGCA GCTGCGTGGC CGCCGAGACC ACGCGGGAGG TGATCTGGTG GGACAAACGT TCCGTCTGCT CCCGAGTCAG GAGATCGAGT CTC

SEO ID NO:2414: (Length of Sequence = 92 Nucleotides)

AAGGGCAGG ATGGGCTGG GAAGTCCAAC CCCACGCATT TGGGCTCAGC CTTGGACATG GAGGCCTGAC AGCTGTTGTC

SEQ ID NO:2415: (Length of Sequence = 401 Nucleotides)

CTITICCCIT CIGIGENCCA AATGCANCAT CITNATACAC GITGCITAAC CIAGAANCGI GGCICCACCG TGAATICTAA
TIGGICCGIG CIATCGAGGC ACTGICCCCI TAACIGGICI CGCICCAGIG GCCCCNACIG CITITCITCC TCITCCAGNA
ATGGCICITC GGGCCCAGAG TICGAATCIC GCGATCGGGA TGGGGACGGA GIACCGGCCT GGGGIGICCC AGAGCCCGGA
CTGAGCTGGG GAGTCAAGAC CICGGGGAT GAGGCCTGAG CAAGTCGGAG TCGIAGGICC AGTTCITCCC
CAGCTICICC
CGCCCCAAT CIGITGGGIT CITGGGGTIC TICGICITCC AGCGGGGIGG AGCIGCTGGI GGAAGAGICC TCCCCGGATC
C

SEQ ID NO:2416: (Length of Sequence = 245 Nucleotides)

ATGIAATACA GIGIAGAAAG CGATCATGIC ATAAGCAATG ATTCIGIACA ATCATNCNGC AGAAAATTAG TITITGGAGAA
TTCITIGGIAA TIGAAGACCA GCAGAGCACC CCTCCCCACC CGCCCCCTAA AAGIGCTTAC AATTTACAGG GATYCITTIC
TTTITCAAAG ACCCAAAGAY ACGIGGICAG AAAAMAAAAG CITGAAGICT CAATGCCTAA TGICGIGCAC ATTKNACAGG
GACGC

SEO ID NO:2417: (Length of Sequence = 384 Nucleotides)

GGITTIGCAA GAIGAIGGAA CATCCCATAA GCCCAGGIGI GCAGCIAACC TITAGAAGCI GGAAAAGGCA AGGAAACATA
TICIGIAGAG CCICCAGAAG GAACACACGI CIGCACACAC TITIGITITIA GCICAGIGAA ACIGATITIG GACIACIGAC
CTICAGAACI GIAAGATAAA TICCIGIIGI TITACGITIG TOGIGITATA GAAGITACAG AAATGAATAT ACITACOGIA
GTITAGAGAG AGAIGGGAGG ATACITITIT TICICCCITC TITITGAAGG GAOGIAGGIC TCCITAACIC CAGAOGAAAG
ACITGICITI CITCATATAG GOGCCCTITG ATICITAAIT CATGGGAGIT GITTAGGAGA TIGA

SEQ ID NO:2418: (Length of Sequence = 1645 Nucleotides)

GTGATGGCTG CCTTGAGGGG GACCATCATG TOGGAGACCG CATTGGTGCA GGTCTCACCC CACAGCCCAT GCCCAGCCTC CTGCAGACTC AGGICATCCA GCTGGTCGAT GGCTCTTTGC ATACCTGGTG CCTTCTCCTC TCGGGCTTGG CAGGCTTCTC TEGGGGCTTC TCAGATGACT CTTTTGCCTT CTTCTCTGTC TTGGCTAACT CCTTGGCCAG CTCTGAACGT GCCTCCTTGG CTCCCTCTTC TACCACCTCC TCCCGTTTGG CCAACTTGCT CACGGCCGTC TTGGTAGTGG CTTTGAGGCT CTCCTTGCTA TCAGCCCCCT GTTTGATTTT GCTGGCCTTG AGGTTGGTAG GCACAGCCCC AGAAGCCAGG NCCTTCTGCG TGGCCACAGG GTAACGCAGG AAGTCCAGAT GCCGAAGCTT TTCTAGGCCC TCCAAGATCT TGTTTTGGGG AGCATTTCCT GGAAAAAGCA CACGCACAAT CTTCTCAGTG GGATTGGCTG GTAGCCAGAC CACCAGAGCA GTGATAGAGG TAAGGTAGGG CACGGAGATC TCAGCCTCCT TCCCATTGGG CAGCACGATG CCTGINITIGG CTTTACTATT GCCTGCCCAC TTTTGCATGA GGAACTGCAT CTCCTTGCTG TCCTTGACAG GGTTGAGGAC ATACATGTCC AGCCGGCCCA CACCCATTTT GTGGAAGAGG GTCAGTGGCT CARTGGTATT GCTGACCACA CGATATAGAG GCTCAGCCTG GATGCCCAGG CGGTTTAAGT GCTGCAGAGT GAGGCAGGCC TCCTCAATGC TACGCTTGGC TITCCGGGAG GCATCAGGAA GCCGCAGCTT CTCAGGCACG TTGAAAAAGA CAACTCCAAG CTCAGGANAG ATAAGGTTCT TCACCCAGTC GCTGTAACTG CTAGAGCCCT GGNACTGCTC CTCCTCTAGC TCTGCCACTT TECECTECAG TAGTCCATTE ATECCTEECA GETTETCTEC CCCAATGTET GINAGTAGCA CCGAGTCAAT GCGGTCCAAG TINCOGTACCA GCTTCCAAAA ACAGGACTIG CGATCAGAGC CACCATCCAC CAGGATGITG AAACCATTGA CAGCAAAGAG GECAGAGTICC CCACGACCAC CTGGGAAGAT GTAGCAACAA GGCTTGGAGGA GCTTGAGGAA GCCCCCTGAG GTGGGGGGCT CTAGTAGGIC AAATGGGGAT GGCACGTCCA CAGTCTCAGA GACATACTCG GAGAACTCAG CCACGCCGTC CATGGTGGGC AGAGIGGGCT CAGGGITTAG COGGAGGIGC AGGGICTICTT GGGAACTGGA TAATCCCAGG TGGCTCCAAT CACCITCCCC TAAGCAGGAC ACGGTAAGGA AGGCCTGTAT CCCAGGGTCT CTATTGCTGA GCAATTGGGA AATCTCGGGG TTGTGAAGGA CCIGGGCAAA GITTICATAT GAGIAGGIGC CACTCIGIAG GATGAGGICT CCCCCAGGCT CIAAACITIG CCCACTCAAG ATTAGTAGTT TATAAGCTGA TGAGCTGCTA AGAAGATGAT GAACCTCAGA GCTGATGCTG TCTGCACTGG GATTTACCAG GATGATGGTC TCTAGGATCT CACTCTGGTG GCAAAGGGTC CTCTG

### SEO ID NO: 2419: (Length of Sequence = 837 Nucleotides)

GGAAGGATGA GAAACAGATT TINTECTCACT TCATGGGCTG GCCTGGAATT GACGATGGTG CAAACCCAAA TINATCCTGAT GTAATTINATG AAGATTATGG AACTGCAGG AATGACATCG GGGACACCAC GAACAGAAGT AATGAAATCC CTTCCACAGA CGTCACTGAT AAAACCGGTC GGGAACATCT CTCGGTCTAT GCTGTGGTGG TGATTGCNTC TGTGGTGGGA TTTTCCCTTT TGGTAATGCT GTTTCTINCTT AAGTTGGCAA GACACTCCAA GTTTGGCATG AAAGGTTTTG TTTTGTTTCA TAAGATCCCA CTGGATGGGT AGCTGAAATA AAGGAAAAGA CAGAGAAAGG GGCTGTGGTG CTTGTTGGTT GATGCTGCCA TGTAAGCTGG ACTCCTGGGA CTGCTGTTGG CTTATCCCGG GAAGTGCTGC TTTATCTGGGG TTTTNCTGGTA GATGTGGGCG GTGTTTGGAG

GCTGTACTAT ATGAAGCCTG CATATACTGT GAGCTGTGAT TGGGGAACAC CAATGCAGAG GTAACTCTCA GGCAGCTAAG CAGCACCTCA AGAAAACATG TTAAATTAAT GCTTCTINTC TTACAGTAGT TCAAATACAA AACTGAAATG AAATCCCATT GGATTGTACT TCTININCTGA AAAGTGTGCT TTTTGACCCT ACTGGACATT TATTGACTTA ATTGCTTCTG TTTATTAAAA TTGACCTGCA AAGTTAAAAA AAAATTAAAG TTGAGAACAG GTATAAGTGC ACACTGAATA GTCTAATCTA CATGTAACAC ATATTTINGT ATGATTTCT ATACTCTAAT CAGCACT

## SEO ID NO:2420: (Length of Sequence = 1843 Nucleotides)

GAAGCTCCGG CCCAGGTGGC CGCTGGCTGC TGAGCTCACG CCAAGGTGCG GCTGTGGTGG TGGTGGTGGC GGCTGCAGGC TITICCIGCIG CIGGATGITT GCTGCCIGCA GGITCTGCIG CIGCATCTGT AAGITTTIGIG GCTGCACCTG CTGGGTCTGC ACCAGGTGAG GCTGGGTGGC CAGCCGGGTG CTGGGCAGGC CCTGGTAGCT CATCATCTGG GACAGGGCGC TGGCAGCAAG GCTACTGTGC AGCGGGCCTA CCATGCCATG CTGCAGGGAG GGGGCCTGTG TGCTCAGGGG GCCTGGTGCC ACACTCCCCC GCAGAGGGTT GTATTGGTTC GGCACCATGC CGCTCTGCAG CCGGGACAGC CACTCGCATT GACCATTCAA ACTGGTGGAC CCENCCACAG TGAAATTCAG GGCCCCTCCG CTGCTNGAGC CCAGGACGGT GCTGGTGCCA GAGGCCCACAG GCAGGTGGGA GAGACGAGGT GGGCCAGTINT TAAAGGCCAG CCGGCCGCCC CCACCCCANCG CCGCCATYTC GGGCTTGGCC GCCACGTTCA GGTNCCCNAT GCCCAGGTGG GTGTCGGGCA TYCCAGGCAG GTGGTTGAGG GGCACGGACG GAGACTGCTG GAACGGGGAG GGCAGNAGTG GCGGCGAGGC CACGTCTGAC AGGTAGCCAT GGGGTGACTC CAGGGAGTCC ACGGGCGAGA GCATGCCGGA GCTGTCCAGC AGGCAGNCCT TGCCGTCCTG GGACTTCTTC CTCCGTGCCT TGAGGTCCTT GGCCTCCTTG CTTCCACAGG CCAGGCCTTT GCTGCTGGGC TTGCGGACCT TCTTGCCCTG CACGCCGGGC TTGAGGCTGC CCAGGTAGCC GTTGGGCGAG CAGAGCENEG GCGACAGGGT GGGCGTGCCC CCCAGCGGGC TCCGTGCAGC TGCGGGCTGC GCACCAGGTT GTACTCGTCC AGCAGCCTCA CGATGTCGTG ATGCATGCNC TCCTNTGCGA TGTCGCGCGG CAGGCGGTCC ATATGATCCG TGATGTCCCG GTTGGCAAAG TGGTCCAGCA GCACCTTGGC GGTCTCGTAG CTGCCCTCCC GGGCGGCCAG AAACAGGGT GTCTCCTCCC TETTETTCTG CATATCTTTG TTAGCCCCGT TCTTCAGGAG CACAACTGCG GCATCCACAT TETTCACNGC GGCGCCCCAG TECAGGEGG ACTIGCCCAG GINATCIACG GCGTTGACGI CGGCGTGTGA GTTGATGAGG TCCTCCAGCA TGCCCTCCAC GGCCAGGCG GCAGCCAGGN TCAGTGGCGT CGTGCCATCA TGCATGCGGG CATCCAGGTC TGTGGCTCGG TTCCGGATCA GGATCTTGGA AGACACCTTG TGCGTCGGCA GACACAGCCG CATGCAGCGG GGTGCGGCCC ATGTTGTCCT GGATGTTGGC ATCTGCGCTG GCCTCCAGCA GGCGCTTGGC GGCATCAGAG CGTGAAGTAGC GGGCGGCCAG GTGCAAGGCG GTCTCGCCCCG INCOGNICIET CTOGNITGIGC AAGCTOGCGC CCTOGNAGAT GAAGTCOGAG ATGACOGCCG GCGCGTCCTC CTCTTCCTCG CTGTTGCCCG TCTCCAGGCC GCCCCGCTG CAGGAGGCGA TCATGAGCGG GGTGAAGCCA TCAGGCCCGC GGACATTGAC GTCCATGCAG TCGGCGTCAA CCTCACCCTG GGGCGGTGTG GGGGCCATGG CANACATGCG CAGGTCAGCG GCATCCAGGT GCTGCTGAGT CCACTGCCGG TGGTCTGTCT GGTCGTCCAG GTCAGGCAGA ACCACGGGCT CCTCGAACCG GAACTTCTTG GIC

# SEO ID NO:2421: (Length of Sequence = 1452 Nucleotides)

 GCTTTCTTCC TACCCCATTC COGGCTTCCC TCCTCCTCCC CTGCAGCCTG GTTAGGTGGA TACCTGCCCT GACGTGTGAG
GCAAGNTAAG GCCTGGAGGG TCAGATGGGG AGACCAGGTC CCAAGGGAGC AAGACCTCGC GANGCARGCA AGCCCCNGCC
CTTCCCCCGT TTTGAACATG TGTAACCGAC AGTCTGCCTG GGCCACAGGC CTCTCACCCT GGTACTGCAT GGACGNAATG
CTAGCTGCCC CTTTCCCGTN CTGGGCACCC CGAGTNTCCC CCGACCCCGG GTCCCAGGTA TGCTCCCACC TCCACCTGCC
CCACTCACCA CCTCTGNTAG TNCCAGACAC CTNCACGYCC ACCTGGTCCT CTNCCATCGC CCACAAAAGG GGGGCACGA
GGGGACGAGCT TAGCTGAGCT GGGAGGAGCA GGGTGAGGGT GGGCGACCCA GGATTCCCCC TCCCCTTCCC AAATAAAGAT
GAGGGTACTA AAGTTGTCTT GGTTTTTATT TTATTATTAT TTTTTTCTTT TTCCAGTATA CTAGCTTGTC TTTTAAGAAA
GGGGATATTA AAAAAAAAA AAAGACAAAA GTGTTTTTAA AAAAAAAGCAA CACCCACACC TGGTGTCTT ATATAGTCAG
CTTATCTCGT GTTCAATCGT CTGATCTCTA CAGAGAGAAG TGGAAAATGC TGTATCAAGG GTGGGCTTAG CTGTGCCTTT
CCAATAAAGA TG

20

25

30

## 5 WHAT IS CLAIMED IS:

1. A purified polynucleotide having a sequence designated as one of:

SEQ ID NO: 316 - 2421, except SEQ ID NOS 650, 1834, and 2073;

or having a sequence complementary thereto.

2. A purified polynucleotide having a sequence designated as one of:

SEQ ID NO: 316 - 2421, except SEQ ID NOS: 485, 650, 1834, 2073, 2092, and 2353;

or complementary sequence thereto or, for those sequences over 150 nucletides long, a portion thereof at least 150 nucleotides in length.

3. An isolated polynucleotide that includes a sequence designated as one of:

SEQ ID NO: 316 - 2421, except SEQ ID NOS: 485, 650, 1834, 2073, 2092, and 2353;

or complementary sequence thereto or, for those sequences over 150 nucleotides long, a portion thereof at least 150 nucleotides in length.

4. An isolated polynucleotide operably coding for a native human polypeptide or protein, which includes a region coding for the same amino acid sequence as a native human coding region corresponding to a sequence designated as one of:

SEQ ID NO: 316 - 2421.

- 5. The polynucleotide of Claim 4, wherein said SEQ ID NO is listed in Table 6 and is one of SEQ ID NOS: 316-2421.
  - 6. The polynucleotide of Claim 4, wherein said SEQ ID NO is listed in Table 7 and is one of SEQ ID NOS: 316-2421.
- 7. The polynucleotide of Claim 4, wherein said SEQ ID NO is identified in Table 10 in a metabolic functional grouping and is one of SEQ ID NOS: 316-2421.

15

20

25

30

- 8. The polynucleotide of Claim 4, wherein said SEQ ID NO is identified in Table 10 in a structural functional grouping and is one of SEQ ID NOS: 316-2421.
- 9. The polynucleotide of Claim 4, wherein said SEQ ID NO is identified in Table 11 in a developmental control grouping and is one of SEQ ID NOS: 316-2421.
- 10. An isolated polynucleotide coding for a human protein or polypeptide, which includes a coding region corresponding to the EST identified as:

10 SEQ ID NO: 316 - 2421;

or a polynucleotide complementary thereto.

- 11. The polynucleotide of Claim 10, wherein the SEQ ID NO is 316-1000.
- 12. The polynucleotide of Claim 10, wherein the SEQ ID NO is 1001-1500.
- 13. The polynucleotide of Claim 10, wherein the SEQ ID NO is 1501-2000.
- 14. The polynucleotide of Claim 10, wherein the SEQ ID NO is 2001-2421.
- 15. The polynucleotide of Claim 10, wherein said polynucleotide further includes the entire sequence designated as any one of SEQ ID NOS: 316-2421.
  - 16. An isolated polynucleotide comprising at least 150 bp of a sequence of Claim 10 and wherein said SEQ ID NO excludes NOS 485, 650, 1834, 2073, 2092, and 2353.
  - 17. An isolated polynucleotide sequence, which hybridizes to a sequence designated as any one of SEQ ID NOS 316-2421, except SEQ ID NOS 485, 650, 1834, 2073, 2092, and 2353, or to a sequence complementary thereto, under hybridization conditions sufficiently stringent to require at least 97% base pairing.
  - 18. A polynucleotide according to any one of Claims 4-17, in substantially purified form.
  - 19. A construct in isolated form comprising a vector and a polynucleotide according to any one of Claims 1-17.
- 35 20. The construct according to Claim 19, further comprising a promoter operably linked to said polynucleotide.

10

- 21. A panel of at least 100 isolated polynucleotides having the sequences of Claim 3 or Claim 16.
- 22. An antisense oligonucleotide capable of blocking expression of any one of the polynucleotide-encoding sequences of Claim 10.
- 23. A triple helix probe capable of blocking expression of any one of the polynucleotide-encoding sequences of Claim 10 having at least a 10-base homopurine or homopyrimidine sequence, said probe comprising single-stranded DNA having at least a 10-base homopurine or homopyrimidine sequence and being adapted to bind to the major groove of double stranded DNA which includes said polynucleotide-encoding sequence.
- 25. The polynucleotide of Claim 1, wherein said SEQ ID NO is 913.
- 15 26. The polynucleotide of Claim 1, wherein said SEQ ID NO is 1039.
  - 27. The polynucleotide of Claim 1, wherein said SEQ ID NO is 1395.
- 28. The polynucleotide of Claim 1, wherein said SEQ ID NO is 1567.
  - 29. The polynucleotide of Claim 1, wherein said SEQ ID NO is 1667.
  - 30. The polynucleotide of Claim 1, wherein said SEQ ID NO is 1704.
- 25 31. The polynucleotide of Claim 1, wherein said SEQ ID NO is 2089.
  - 32. The polynucleotide of Claim 1, wherein said SEQ ID NO is 2297.
- 33. The polynucleotide of Claim 1, wherein said SEQ ID NO is 2302.

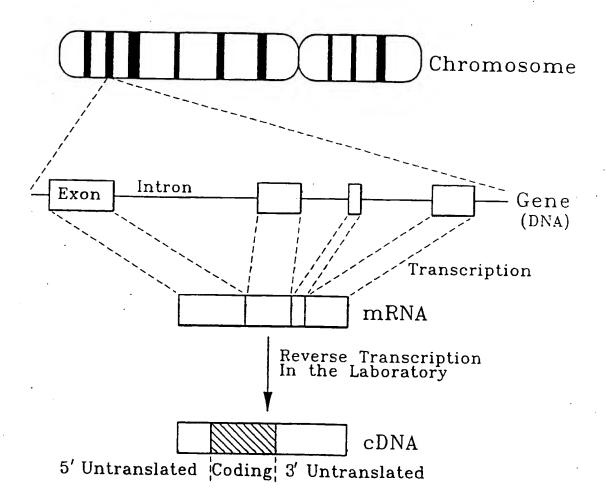


FIG. 1

P